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I'VE read this useful tract, and there'in find
The lively strokes of Aristotle's mind ;
And they that do with understanding read,
Will find it is a Master-Piece indeed ;
For on this subject there is none can write,
At least so well as our great Stagyrice,
He nature's cabinet hath open laid,
And her abstrusest secrets here display'd ;
Here modest Maids, and Women being ill,
Have got a Doctor to advise with skill,
Where they mayn't only their distemper see.
But find a sure and proper remedy.
For each disease, and every condition ;
And have no other need of a physician :
For which good end, I'm sure, it was design'd :
And may the reader the advantage find.

WILLIAM SALMON.

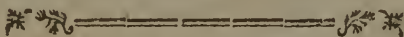


ARISTOTLE'S
MASTER-PIECE,
OR THE
SECRETS OF NATURE
DISPLAYED IN THE
GENERATION *of* MAN :
COMPLETE IN THREE PARTS.
TO WHICH IS ADDED.
A TREASURE *of* HEALTH :
OR, THE
FAMILY PHYSICIAN.

Being choice and approved Remedies for all the several Distempers incident to the Human Body.

THE WHOLE

Being more Correct than any thing of the kind hitherto published.



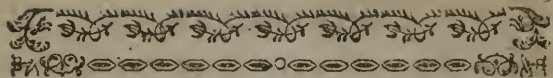
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1801.





INTRODUCTION.

IF one of the meanest capacity were asked, What was the wonder of the world ; I think the most proper answer would be man ; he being the little world to whom all things are subordinate ; agreeing in the genius with sensitive things ; all being animals, but differing in the species : For man alone is endowed with reason. And therefore the Deity, at man's creation, as the inspired penman tells us, said, *Let us make man in our own image, after our own likeness.* As if the Lord had said, Let us make man in our image, that he may be (as a creature may be) like us ; and the same in his likeness, may be our image—Some of the fathers do distinguish, as if by the image the lord doth plant the reasonable powers of the soul ; reason, will and memory ; and by likeness, the qualities of the mind, charity, justice, patience, &c. But Moses confounded this distinction (if you compare these texts of Scripture,) Gen. i. 17. and v. 1. Colos. x. Eph. v. 14. And the apostle, where he saith, “ He was created, after the image of God, in knowledge, and the same in righteousness and holiness.

The Greeks represent him as one turning his eyes upwards, towards him whose image and superscription he bears.

See now the heaven's high architect,
Hath fram'd man in this wise,
To stand, to go, to look erect,
With body, face and eyes,

And Cicero says, like Moses, All creatures were made to rot on the earth except man, to whom was given an upright frame to contemplate his Maker, and behold the mansion prepared for him above.

Now, to the end that so noble and glorious a creature might not quite perish, it pleased the Creator to give unto Women the field of generation, for the reception of human seed : whereby that natural and vegetable soul, which lies potentially in the seed, may by the plastic power, be reduced into act ; that man, who is a mortal creature, by leaving his offsprings behind him, may become immortal, and survive in his posterity. And because this field of generation, the womb is the place where this excellent creature is formed, and in so wonderful a manner, that the royal Psalmist (having meditated thereon) cries out as one in extacy. " I am fearfully and wonderfully made !" It will be necessary to treat largely thereon in this book, which to that end, is divided into three parts.

The first wherof treats of the manner and parts of generation in both sexes : For from the mutual desire they have to each other, which nature has implanted in them to that end, that delight which they take in the act of copulation, does the whole race of mankind proceed : And a particular account of what things are previous to that act, and also what are consequential of it ; and how each member concerned in it is adapted and fitted to that work to which nature has designed it. And though in uttering more things, something may be said which those that are unclean may make bad use of, and use it as a motive to stir up their pestilial appetites ; yet such may know this was never intended for them ; nor do I know any reason that those sober persons for whose use this was meant, should want the help thereby designed them, because vain loose persons will be ready to abuse it.

The second Part of this Treatise is wholly designed for the female sex, and does largely not only treat of the distempers of the womb, and the various causes, but also give you proper remedies for the cure of them. For such is the ignorance of most women, that when by any distemper those parts are afflicted, they neither know from whence it proceeds, nor how to

apply a remedy : and such is their modesty also, that they are unwilling to ask, that they may be informed ; and for the help of such is this designed. For having my being from a woman, I thought none had more right to the grapes, than she that planted the vine.

And therefore observing, that among all diseases, incident to the body, there are none more frequent and perilous, than those that do arise from the ill state of the womb ; for through the evil quality thereof, the heart, the liver, and the brain are affected, from whence the actions, vital, natural, and animal, are hurt ; and the virtues, connective, sanguificative, distributive, attractive, expulsive, rective, with the rest, are all awakened ; so that from the womb come convulsions, epilepsies, apoplexies, palsies and fevers, dropies, malignant ulcers, &c. And there is no disease so bad, but may grow worse from the evil quality of it.

How necessary therefore is the knowledge of these things, let every unprejudiced reader judge ; for that many women labour under them through their ignorance and modesty, as I said before, woful experience makes manifest : Here therefore, as in a mirror, they may be acquainted with their own distempers, and have suitable remedies, without applying themselves to physicians, against which they have so great reluctance.





ARISTOTLE's
MASTER-PIECE.

PART FIRST.

C H A P. I.

Of marriage, and at what age young men and Virgins are capable of it ; and why they so much desire it. Also how long Men and Women are capable of having children.

THERE are very few except some profess debauchees, but what will readily agree, that marriage is honourable to all, being ordained by heaven in paradise, and without which, no man or woman can be in a capacity honestly to yield obedience to the first law of the creation, "Increase and multiply." And since it is natural in young people to desire these mutual embraces, proper to the marriage bed, it behoves parents to look after their children, and when they find them inclinable to marriage, not violently to restrain their affections; and oppose their inclinations (which, instead of allaying them, makes them but the more impetuous) but rather provide such suitable matches for them, as may make their lives comfortable, lest the crossing of their inclinations should precipitate them to commit those follies that may bring an indelible stain upon their families.

The inclinations of maids to marriage, is to be known by many symptoms : For when they arrive at puberty, which is about the 14th or 15th year of

their age, then their natural purgations begin to flow, and the blood, which is no longer taken to augment their bodies, abounding, stirs up their minds to venery. External causes also may incite them to it; for their spirits being brisk and inflamed, when they arrive at this age, if they eat hard salt things and spices, the body becomes more and more heated, whereby the desire to veneral embraces is very great, and sometimes almost insuperable. And the use of this so much desired enjoyment being denied to virgins, many times is followed by dismal consequences, as, a greenwessel colour, short breathing, trembling of the heart, &c. But when they are married, and their veneral desires satisfied by the enjoyment of their husbands, those distempers vanish, and they become more gay and lively than before. Also their eager staring at men, and affecting their company, shews that nature pushes them upon coition; and their parents neglecting to get them husbands, they break through modesty to satisfy themselves in unlawful embraces. It is the same with brisk widows, who cannot be satisfied without the benevolence which their husbands used to give them.

At the age of 14, the menses in virgins being to flow when they are capable of conceiving, and continue generally to 44, when they cease bearing, unless their bodies are strong and healthful, which sometimes enable them to bear at 55. But many times the menses proceed from some violence offered to nature, or some morbid matter which often proves fatal to the party. And therefore those men desirous of issue, must marry a woman within the age aforesaid, or blame themselves if they meet with disappointment; tho' if an old man not worn out with diseases and incontinency, marry a brisk, lively lass, there is hopes, of his having children to 70, nay sometimes till 80.

Hippocrates holds, that a youth at 15, or between that and 17, having much vital strength, is capable of getting children; and also, that the force of procreate.

ing matter, increases till 45, 50 and 55, and then begins to flag, the seed by degrees becoming unfruitful, the natural spirits being extinguished, and the humours dried up. Thus in general, but as to particulars, it often falls out otherwise. Nay, it is reported by a creditable author, that in Sweedland a man was married at 100 to a bride of 30 years and had many children by her: But his countenance was so fresh that those who knew him not, took him not to exceed fifty. And in Capania, where the air is clear and temperate men of 80 marry young virgins, and have children by them; shewing, that age in them hinder not procreation, unless they are exhausted in their youth, and their yards shriveled up.

If any would know why a woman is sooner barren than a man; they may be assured that the natural heat, which is the cause of generation, is more predominant in the latter than in the former; For since a woman is truly more moist than a man, as her monthly purgations demonstrate, as also the softness of her body it is also apparent, that she doth not exceed her in natural heat, which is the chief thing that concocts the humours into proper aliment; which the woman wanting, grows fat; when a man, through his native heat, melts his fat by degrees, and his humours are dissolved, and by the benefit thereof are elaborated into seed. And this may also be added, that women generally are not so strong as men, nor so wise nor prudent; nor have so much reason and ingenuity in ordering affairs: which argues that thereby their faculties are hindered in operations.

—○○—
C H A P. II.

A particular Description of the Parts and Instruments of Generation, both in Men and Women.

SECT 2. *Of the Instruments of generation in men with a particular description thereof.*

THOUGH the instruments or parts of generation in all creatures, with respect to their outward

form, are not perhaps the most comely; yet in compensation of that nature has put upon them a more abundant and far greater honour than on other parts, in ordaining them to be the means by which every species of being is continued from one generation to another. And thereof tho' a man or woman were, through the bounty of nature, endowed with angelic countenances, and the most exact symmetry and proportion of parts that concurred together to the making up of the most perfect beauty, yet, if they were defective in the instruments of generation, they would not for all their beauty be acceptable to either of the other sex: because they would thereby be rendered incapable of satisfying the natural propensions which every one finds in himself. And, therefore, since it is our duty to be acquainted with ourselves, and to search out the wonders of God in nature, I need not make any apology for anatomizing the secret parts of generation.

The organ of generation in man, nature, has placed obvious to the sight, and is called the yard; and because hanging without the belly, is called the penis a pendeno. It is in form, long, round, and on the upperside flattish, and consists of skin, tendons, veins, arteries, and sinews, being seated under the *Ossa Pubis*, and ordained by nature for a two fold work, viz. for the evacuation of urine, and conveying the seed into the matrix. The urine which it evacuates is brought to it through the neck of the *Vesica Urinaria*, and the seed which it conveys into the matrix, is brought into it, from the *Vesiculae Seminales*. But to be more perticular.

Besides the common parts, as the cuticle, the skin and the *Membrana Carnosa*, it has several internal parts proper to it, of which number there are seven, viz.

The two nervous bodies; the *Stoptun*; the *Urethra*; the Glands; the Muscles; and the Vessels: of each of these distinctly, in the order I have placed them; and, first, of

The two nervous bodies. These are called so from their being surrounded with a thick white nervous membrane, though their inward substance is spongy, as consisting principally of veins, arteries and nervous

fibres, interwoven like a net. And nature has so ordered it, that when the nerves are filled with animal spirits, and the arteries with hot and spirituous blood, then the yard is destined, and becomes erect; when the flux of the spirit ceases, then the blood and the remaining spirits are absorbed, or sucked up by the veins, and so the Penis becomes limber and flabby.

2. The second internal part is the *Stephan Lucidum*, and this is in substance white and nervous, or sinewy; and its office is to uphold the two lateral or side ligaments and the Urethra.

3. The third is the Urethra, which is only the channel by which both the seed and urine are conveyed out; it is in substance soft and loose, thick and sinewy, like that of the side ligaments. It begins at the neck of the bladder, but springs not from thence, only is joined to it, and so proceeds to the glands. It has three holes in the beginning, the largest whereof is in the midst, which receives the urine into it. The other two are smaller, receiving the seed from each seminal vessel.

4. The fourth is the Glands, which is at the end of the Penis, covered with a very thin membrane, by reason of a *Præputium*, or Foreskin, which in some covers the top of the yard quite close, in others not; and by its moving up and down in the act of copulation brings pleasure both to the man and woman. The extreme part of this cover, which I call *Præputium*, and which is so called a *Præputando*, from cutting off, as the Jews were commanded to cut off on the eighth day. The ligament, by which it is fastened to the glands is called *Frænum*, or the bridle.

5. The fifth thing is the Muscles, and these are four in number two being placed on each side. These muscles (which are instruments of voluntary motion, and without which no part of the body can move itself) consists of fibrous flesh to make up their body; of nerves for the sense; of veins for their vital heat; and of a membrane or skin to knit them together, and to distinguish one muscle from the other and all of them from the flesh. I have already said there are two of them on each side; and I now will add, that one on

each side is shorter and thicker, and that their use is to erect the yard, from whence they have obtained the name of ereectors. And having told you that two of them are thicker and shorter than the other, I need not tell you that the other two are longer and thinner; only I take notice, that the office of the two last is to dilate, if you will, open the lower parts of the Urethra, both for making water, and voiding the seed, and therefore are called Accelerators.

6. The sixth and last things are the vessels, which consist of Veins, Nerves and Arteries; of which some pass by the skin, and are visible to the eye, and others pass more inwardly. For indeed the Arteries are dispersed through the body of the yard, much more than the veins, and the dispersion is contrary-wise, the right artery being dispersed to the left side, and the left to the right: as for the two nerves, the greater is bestowed upon the muscles and the body of the yard, and the less upon the skin.

What I have hitherto said relates to the yard, properly so called; but because there are some appendices belonging thereto, which when wanted, render the yard of no use in the act of generation, it will also be necessary before I conclude the section, to say something of them, I mean the stones, or testicles, so called because they testify the person to be a man; their number and place is obvious; and as to their use in them the blood brought thither by the spermatick arteries is elaborated into seed. They have coats or coverings of two sorts, proper and common; the common are two, and invest both the testes: the outermost of the common coats, consists of cuticula, or true skin, called Scrotum, hanging out of the abdomen, like a purse: the Membrana Carnosa is in the innermost. The proper coats are also two: the outer called Elithroidis or Vaginalis, the inner Albuginea; into the outer are inserted the Cremasters: to the upper part of the testes are fixed the Epidermis, or Parastatæ, from whence arise the Vasa Deferentia, or Ejaculatoria; which when they approach near the neck of the bladder, deposit the

seed into the *Siculæ Siminales*, which are each, or two or three of them like a bunch of grapes, and emit the seed into the *Urethra*, in the act of copulation. Near those are the *Paraſtataæ*, which are about the bigness of a walnut, and join to the neck of the bladder. These afford an oily, slippery and salt humour, to besmear The *Urethra*, and thereby defend it from the acrimony of the seed and urine. Besides these vessels, by which the blood is conveyed to the testes, or of which the seed is made, and the arterie *spermaticæ*, there are also two; and so likewise are the veins, which carry out the remaining blood which are called *venæ spermaticæ*.

And thus those nobler parts we see
 For such the parts of generation be;
 And they that carefully survey will find
 Each part is fitted for the use design'd:
 The purest blood we find if well we heed,
 Is in the testicles turn'd into seed;
 Which by the most proper channels is transmitted
 Into the place by nature for it fitted.
 With highest sense of pleasure to excite
 In amorous combatants the more delight,
 For in this work nature doth design
 Profit and pleasure in one act to join.

SECT. II. *Of the Secret parts in Women.*

WOMAN, next to man, the noblest piece of this creation, is bone of his bone, and flesh of his flesh, a sort of second self, and, in a married state, are accounted but one, as the Poet says.

Man and his wife are but one right
 Canonical hermaphrodite.

It is therefore the secret parts of that curious piece of nature that we are to lay open, which we will do with as much modesty as will consist with speaking intelligently.

The external parts commonly called *Prudenda*, from the shame-facedness that is in women to have them

seen, are the lips of the great orifice, which are visible to the eye; and in those that are grown are covered with hair, and have a pretty store of spongy fat: their use being to keep the internal parts from all annoyance by outward accidents.

Within these are the Nymphæ, or wings which present themselves to the eye when the lips are severed, and consist of soft and spongy flesh, and the doubling of the skin placed at the sides of the neck, they compass the clitoris, and both in form and colour resemble the comb of a cock, looking fresh and red, and in the act of coition receive the penis or yard betwixt them; besides which they give passage both to the birth and urine. The use the wings and knobs like myrtle berries, shutting the orifice and neck of the bladder, and by the swelling up, cause titillation and delight in those parts, and also to obstruct the volutary passage of the urine.

The next thing is the clitoris, which is the fleshy and hard part of the womb, replete with spongy and black matter within, in the same manner as the side ligaments of the yard: suffers erection and falling in the same manner, and both stirs up lust and gives delight in copulation; for without this, the fair sex neither desire nuptial embraces, nor have pleasure in them, nor conceive by them; and according to the greatness or smallness of this part, they are more or less fond of men's embraces; so that it may properly be stiled the seat of lust.

Blowing the coals of those amorous fires,

Which youth and beauty to be quench'd requires.

And it may well be stiled so; for it is like a yard in situation, substance, composition, and erection, growing sometimes out of the body two inches, but that happens not but upon some extraordinary accident. It consists, as I have said of two spongy and skinny bodies, which being a distinct original from the Os Pubis, the head of it being covered with a tender skin, having a hole like the yard of a man, but not through, in which and the bigness of it, it only differs,

The next thing is the passage of the urine; which is under the clitoris, and above the neck of the womb, so that the urine of a woman comes not through the neck of the womb, neither is the passage common as in men but particular and by itself. This passage opens itself into the fissures to evacuate the urine; for the securing of which from cold, or any other inconveniency, there is one of the four carbuncles, or fleshy knobs, placed before it, which shuts up the passage.—For these knobs, which are in number four, and in resemblance like the myrtle berries, are placed behind the wings before spoken of quadrangularly, one against the other. These are round in virgins, but hang flaccid when virginity is lost. 'Tis the uppermost of these that nature has placed for the securing the urinary passage from cold, and which is therefore largest and forked for that end.

The lips of the womb, that next appear, cover the neck thereof, but being separated disclose it; and then two things are to be observed, and these are the neck itself, and the Hymen more properly called the *Clastrum Virginalc*, which I shall treat more at large when I come to shew what virginity is. The neck of the womb, I call the channel, is between the forementioned knots and the inner bone of the womb, which receives the man's yard like a sheath; and that it may be dilated with the more ease and pleasure in the act of coition, it is sinewy and a little spongy; and there being in this concavity divers folds or orbicular plaits made by tunicles, which are wrinkled, it forms an expanded rose that may be seen in virgins: but in those that have used copulation, it comes by degrees to be extinguished; so that the inner side of the neck of the womb appears smooth, and in old women it becomes more hard and gristly. But though this channel be sinking down, wreathed, and crooked, yet it is otherwise in the time of copulation; as also when women are under the monthly purgation, or in labour, being then very much extended, which is a great cause of their pains.

The *Clastrum Virginalc*, commonly called the Hymen is that which closes the neck of the womb; for be-

tween the duplicity of the two tunicles which constitute the neck of the womb, there are many veins and arteries running along, that arise from the vessels of both sides the thighs, and so pass into the neck of the womb, being very large, and the reason thereof is because the neck of the womb requires to be filled with abundance of spirits to be dilated thereby, that it may the better take hold of the penis, such emotions requiring great heat, which being more intense, by the act of friction, consume a great deal of moisture, in the supplying of which large vessels are very necessary ; hence it is that the neck of the womb in women of reasonable stature, is eight inches in length. But there is also another cause of the largeness of these vessels, because their monthly purgations make their way through them ; and for this reason, women, though with child, often continue them : for though the womb be shut up, yet the passage in the neck of the womb, through which the vessels pass is open. And therefore, as soon as you penetrate the pudendum there may be seen two little pits or holes, and in which are contained an humour, which, by being pressed out in the time of coition, does greatly delight the fair sex.

I shall, in the next place, proceed to a description of the womb, which is the field of generation, without which nothing can be done. The parts we have been speaking of, being ordained by nature to convey the seed to the womb, which being impregnated therewith, by virtue of the plastic power of nature, produces its own likeness.

The womb is situated in the lower parts of the hypogastrium, being joined to its neck, and is placed between the bladder and the strait gut, so that it is kept from swaying or rolling ; yet hath its liberty to stretch and dilate itself, and also to contract itself, according as nature in that case disposes it. It is of a round figure, somewhat like a gourd ; lessening and growing somewhat more accute towards one end, being knit together by its proper ligaments, and its neck joined by its own substance, and certain membranes that fasten it to the Os Sacrum and the spine bone. It is very different

with respect to its largeness in women, especially between such as have had children, and those that have had none. It is so thick in substance, that it exceeds a thumb's breadth, and after conception, augments to a greater proportion, and to strengthen it yet more, it is interwoven with fibres overthwart, both strait and winding; and its proper vessels are veins, arteries and nerves; among which there are two little veins which pass from the spermatic vessels to the bottom of the womb, and two bigger from the hypogastricks, touching both the bottom and neck, the mouth of these veins piercing so far as the inward concavity.

The womb, besides what I have already mentioned, hath two arteries on both sides the spermatic vessels and the hypogastricks, which still accompany the veins, with sundry little nerves, knit and interwoven in the form of a net, which are also extended throughout even from the bottom to the pudenda themselves, being so placed chiefly for the sense of pleasure, sympathetically moving from the head and womb.

Here the reader ought to observe, that two ligaments hanging on either side of the womb from the shank bone, piercing through the Peritonæum and joining to the bone itself, causes the womb to be moveable, which upon divers occasions either falls low or rises; the neck of the womb is of a most exquisite sense, so that if it be at any time disordered, either with schirosity, too much hot moisture, or relaxation, the womb is subject to barrenness. In those that are near their delivery, there usually stays a most glutinous matter in the entrance, to facilitate the birth; for at that time the mouth of the womb is opened to such a wideness, as is in proportion to the largeness of the child.

Under the parts belonging to generation in women, are also comprehended the preparatory or spermatic vessels; the preparatory vessels differ not in number from those in man, for they are likewise four, two vessels and two arteries; their rise and original is the same as in man; on the side of them are two arteries which grow from them, differing only in their size and manner of

insertion, the right vein issuing from the trunk of the hollow vein, and the left from the emulgent vein; and on the side of them are two arteries, which grow from the arcuta. These preparatory vessels are shorter in women than in men, because they have a shorter passage, the stones of a woman lying within the belly, but those of man without; but to make amends for their shortness, they have far more windings to and fro, in and out, than they have in men, that so the substance they carry may be the better prepared;—neither are they united as they are in men, before they come to the stones, but are divided into two branches, whereof the greater only passeth to the stones, but the lesser to the sekundated egg, and this is properly called conception. And then, secondly, to cherish and nourish it, till nature has framed the child, and brought it to perfection. Thirdly, it strongly operates in sending forth the birth when its appointed time is accomplished, there dilating itself in extraordinary manner; and so aptly removed from the senses, that no injury accrues to it from thence retaining in itself a strength and power to operate and cast forth the birth.

The use of the preparatory vessels, is to convey the blood to the testicles; of which a part is spent in the nourishment of them, and the production of these little bladders, in all things resembling eggs, through which the *Vasa Præparantia* run, and are obliterated in them. This conveyance of blood is by the arteries; but as for the veines, their office is to bring back what blood remains from the forementioned use.

The vessels of this kind are much shorter in women than men, by reason of their nearness to the testicles, and yet that defect is more than made good by the many intricate windings to which they are subject; for in the middle way they divide themselves into two branches of different magnitude; for one of them being bigger than the other, passes to the testicles.

The testicles in women are very useful; for where they are defective generation work is quite spoiled; for though those little bladders which are on their out-

ward superficies contain nothing of seed, as the followers of Galen, &c. erroneously imaging, yet they contain several eggs (about the number of 20 in each testicle,) one of which being impregnated by the most spiritous part of man's seed in the act of coition descends through the oviducta into the womb, where it is cherished 'till it is become a live child. The figure of these Ovar or eggs, is not altogether round but a little flat and depressed on one side, and in their lower part oval; but where the blood vessels enter them, that is in the upper part, they are more plain, having but one membrane about them, that the heat may have more easy access to the womb, both to the nourishment of itself, and of the infant therein. Let me further add, these spermatic veins receive the arteries as they pass by the side of the womb, and thereby make a mixture of the vital and natural blood, that their work be more perfect. The deferentia, or carrying vessels spring from the lower part of the stones, and are in colour white, substance sinewy, and pass not to the womb straight, but wreathed; they proceed from the womb in two parts, resembling horns whence they are called the horns of the womb.

The stones of woman are another part belonging to the instruments of generation; for such things they also have, as well as men, but they are also differently placed; neither is their bigness, temperament, substance, form or covering the same. As to their place, it is the hollowess of the abdomen, resting upon the muscles of the loins, and so not pendulous, as in man. And that they are so placed is, that by contracting the heat, they may be more fruitful, their office being to contain the ovum, or egg, which being impregnated by the seed of the man, is that from which the embryo is engendered. The stones differ also from men's in their form; for, though they are smooth in men, they are uneven in women; being also depressed or flattish in them, though in men their form is more round and oval. They have also in women but one skin, whereas in men they have four. Nature having wisely contrived to fortify these most against the injuries of the air, that are most exposed to it;

the stones of women being within, but those of men without the belly. They differ also in their substance, being much more soft than those of men, and not so well compacted : their bigness and temperature differ, in that they are less and colder than those of men. Some indeed will have their use to the same as in men, but that is for want of judgment ; for Aristotle and Scotus both affirm, that the woman have no seed, and that their stones differ also in their use from those of men : their use being, as I have already said, to contain that egg which is to be impregnated by the seed of a man.

It now remains, that I say something of the ejaculatory vessels, which have two obscure passages, one on either side, which in substance differ nothing from the spermatic veins. They rise in one part from the bottom of the womb, but not reaching from the other extremity either to the stones or any other part, are shut up and incapable, adhering to the womb, as the solon doth to the blind gut, and winding half way about : though the stones are remote from them, and touch them not, yet they are tied to them by certain membranes resembling the wings of a bat, through which certain veins and arteries, passing from the end of the stones, may be said here to have their passages, proceeding from the corners of the womb to the testicles, and are accounted the proper ligaments by which the testicles and the womb are united and strongly knit together.

Thus the women's secrets I have survey'd,
And let them see how curiously they're made.
And that, though they of different sexes be,
Yet on the whole they are the same as we.
For those that have the strictest searchers been,
Find women are but men turn'd outside in :
And men if they but cast their eyes about,
May find they're women with their inside out.

SECT. III. *Of the Use and Action of the several parts in Women, appropriated to Generation.*

I SHALL next take a survey of the parts of generation both in men and women, and shew the use and ac-

tion of these parts in the work of generation, which will excellently inform us that nature has made nothing in vain.

The external parts in women's privities, or that which is most obvious to the eye at first, commonly called Pudendum, are designed by nature to cover the great orifice, nature intended that orifice to receive the Penis or yard in the act of coition, and also to give passage to the urine, and, at the time of birth to the child. The use the wings or knobs, like myrtle berries, are for the security of the internal part, by shutting up the orifice and neck of the bladder, also for the delight and pleasure; for, by their swelling up, they cause titillation and delight in those parts being pressed by the man's yard. Their use is likewise to obstruct the involuntary passage of the urine.

The use and action of the clitoris in women, is like that of the penis of yard in men, that is, erection; its extreme end being like that of the glans in the men, the seat of the greatest pleasure in the act of copulation, so is this of the clitoris in women, and therefore called the sweetness of love and the fury of venery.

The action and use of the neck of the womb, is the same with that of the Penis, that is, erection; which is occasioned sundry ways; for, First, in copulation, it is erected and made straight for the passage of the Penis to the womb. Secondly, while the passage replete with the the spirits and vital blood, it becomes more straight for embracing the penis. And for the necessity of erection, there is a two fold reason; one is, that if the neck of the womb was not erected, the yard could have no convenient passage to the womb. The other is, that it hinders any hurt or damage that might ensue through the violent concussion of the yard, during the time of copulation.

Then, as to the vessels that pass through the neck of the womb, their office is to replenish it with blood and spirits, that so as the moisture consumes, through the heat contracted in copulation, it may still by the vessels be renewed. But their chief business is to convey nutriment to the womb.

Thus nature nothing does in vain produce,
 But fits each part for what's its proper use ;
 And though of different sexes form'd we be,
 Yet betwixt these there is that unity,
 That we in nothing can a greater find,
 Unless the soul that's to the body join'd ;
 And sure in this Dame Nature's in the right,
 The strictest union yields the most delight.

—○○○○—
 C H A P III.

Of the Retraint of men in the use
 of carnal copulation, by the institution of
 Marriage, with the advantage that it brings
 to mankind, and the proper time for it.

THOUGH the great Architect of the world has been
 pleased to frame us of different sexes, and for the
 propagation and continuation of mankind, has indulged
 us the mutual embraces of each other, the desire where-
 of, by a powerful and secret instinct, is become natural
 to us, yet he would leave them to the law of the Crea-
 tor, who has ordained that every man shall have his own
 wife ; and, though, since man by sinning against his
 Creator, hath fallen from his primitive purity, and has
 multiplied wives and concubines, by which the first insti-
 tution is violated, and the grossest affront given to the
 divine Law-giver ; for the holy Jesus hath told us, That
 in the beginning marriage was of one man to one wo-
 man : so that as these conjugal delights cannot be en-
 joyed but in a married state, so neither in that state, can
 they lawfully be participated of with more than one
 wife. And it is the breaking of this order that has fil-
 led the world with confusion and debauchery ; has
 brought diseases on the body, consumption on estates,
 and eternal ruin to the soul, if not repented of. Let
 all those, therefore of either sex, that have desire to en-

joy the delights of mutual embraces, take care that they do it in a married state with their own wives or husbands, or else it will become a curse to them, instead of a blessing. And, to that end, let them consider what is due to the transgressors of his law, who hath said. *Thou shalt not commit adultery.* Whatever is spoken of the venereal pleasures, is spoken to those who have, or may have, a right thereunto, by being in a married state. For,

Who to forbidden pleasures are inclin'd
Will find at last they leave a sting behind.

SECT. II. *Of the happiness of the married state.*

MATRIMONY, in the present age, is looked upon as a most insupportable yoke :—Wives and husbands are accounted the greatest clogs and burdens to those who give up the reins to their unbridled appetites. Notwithstanding the present mode of thinking is against me, I doubt not of making it appear, that a married state is the most happy condition, (where persons are equally yoked) that is to be enjoyed on this side Heaven.

The author and institutor of marriage, and who first brought man and woman together, was no other than he that made them, even the great Lord of the universe, whose wisdom being infinite, could not but know what condition was good for us ; and his goodness being equal to his wisdom, sufficiently shews the end of this institution was the happiness of the creature he had made ; and indeed man could not be happy without it ; for he saw that it was not good that man should be alone, and therefore made a woman to complete his happiness, which was not perfect whilst he wanted such a help mate for him.

The time of the institution is also very remarkable : for it was whilst Adam and his new made bride were cloathed with all that virgin purity and innocence with which they were created, before they had entertained the least converse with the tempter, or had given way

to one disordered thought; and yet could curiously survey the several incomparable beauties and perfections of each other without sin, and knew not what it was to lust. It was at this time that the Creator united Adam in the holy bands of wedlock.

'Twas in paradise where the first match was made; and which could scarcely have been paradise without it; for paradise is known to be a place of pleasure, wherein they were surrounded with the quintessence of all delights; where there was nothing wanting that might please the eye, charm the ear, or gratify the taste; and yet Adam was not happy with these pleasing sweets 'till he enjoyed his Eve; so that it was a married state which completed his happiness, and which was a paradise itself.

What an addition to happiness a good wife makes! such a one is the best companion in prosperity, and in adversity the surest friend; the greatest assistance in business, the only lawful and comfortable means by which he can have issue, and the great remedy against incontinence; and, if we believe king Solomon, The greatest honor unto him that has her. For he tells us, *She is a crown to her husband.* Surely these are not small advantages!

If married persons would be careful to do their respective duties, there would be but little complaining; nor would any condition in life be so agreeable as the married state. How much more satisfaction a man receives in the embraces of a loving wife, than in the wanton dalliances of a deceitful harlot.

Thus does this section unto all relate
 The pleasures that attend the married state:
 And shews it does with innocence consist;
 And that so many have those pleasures miss'd,
 'Tis their own fault, they will no wiser be,
 As in this mirror they may plainly see.

C H A P. IV.

Of Virginity ; what it is ; how it may be known ; by what means it may be lost ; and how a person may know that it is so,

SECT. I. *Of Virginity, and wherein it consists.*

HAVING treated of the desire young men and virgins have to mutual embraces, and at what age they are fit for them ; I have also shewn that those pleasures are only lawful to be enjoyed in a married state : and have also acquainted my reader with the advantage of such a condition. But since the desires of many after mutual embraces are so impetuous, that not having an opportunity to enter into a married state, they have anticipated the pleasures of matrimony, and lost their virginity before hand : and yet perhaps, have afterwards pretended to bring their virginity to the marriage bed, by which means many an honest man has been deceived, and meretricious women escaped with impunity ; and on the other hand, some virtuous young virgins, that have indeed come such unto their husband's beds have been accused by the ignorance and incredulity of their husbands, to have lost their virginity before hand, when there has been no such matter : therefore, to do right in this case to both parties, my design in this chapter is to shew what virginity is, and wherein it consists how many ways it may be lost, and how a man may know that it is so or not : that so women may not be wrongfully censured, or men imposed upon.

Virginity untouched and taintless, is the boast and pride of the fair sex ; but they generally commend putting it off : For as good as it is, they care not how soon they are honestly rid of it. And I think they are in the right of it, for if kept it grows useless, or at least loses so much of its value ; a stale virgin (if such a thing there be) being looked upon like an old almanack, out of date,

But to speak to the purpose, virginity is the chief, the prime, the best of any thing and is properly the integrity of a woman's privities, not violatad by man, or not known by him : it being the distinguished characteristic of a virgin, that she has not known man.

To make this more plain, I must here observe, that there is in maids, in the neck of the womb, a membranous production called the Hymen, which is like the bud of a rose half blown, and this is broken in the first act of copulation with man : and hence came the word *Defloro*, to deflower : whence the taking of virginity, is called the deflowering of a virgin : for when the rose bud is expanded, virginity is lost. Certain it is, there is in the first act of copulation, something that causes pain and bleeding ; which is an evident sign of virginity. But what this is, authors are not agreed on. Some say it is a nervous membrane, or thin skin with small veins, that bleeds at the first penetration of the yard. Others say it is the four carbuncles, knobs, or little buds like myrtle berries, which are plump and full in virgins, but hang loose and flabby in those who have used copulation, being pressed by the yard. Some have observed the fleshy circle about the Nymphææ, or neck of the womb, with little obscure veins, which make the membrane not to be nervous, but fleshy. But sitting aside conjectures, the Hymen or *Clastrum Virginalè*, is a thin membrane interwoven with fleshy fibres, and endowed with many little arteries and veins, spread acrost the passage of the vagina, behind the insertion of the bladder, with a hole in the midst for the menses to flow, so big that it will admit of the top of one's little finger. This is that which is called the Zone, or girdle of chastity ; and where it is found in the form described, it is a certain note of virginity ; but in the first act of copulation it is necessarily violated, and then it is generally accompanied with an effusion of blood, which blood is called the flower of virginity, and, when once it is broke it never closes again.

SECT. II. *How Virginity may be lost, &c.*

IN the former section I have shewn in what virginity, consists, and that it is lost by the first penetration of the yard, which may be easily known by its being attended with an effusion of blood upon the rupture of the Hymenean membrane, or *Claustum Virginalé*; but I must do the fair sex this justice, to let the world know, that although wherever this is found, it is an undoubted token of virginity, yet it will not follow, that where this token is wanting, virginity is deflowered; for the Hymen may be corroded by acrimonious and fretting humours flowing through it with the menses, or it may be violated by the inversion or falling out of the uterus, or of the vagina or sheath, which sometimes happens even to virgins; or, (which all virgins should beware of, for the preservation of their credit, and preventing of suspicion) perhaps the unwary bride has had her menses but a day or two before, in which case both the Hymen and inner wrinkled membranes of the vagina are flabby, weak and relaxed, so that no such rupture or effusion may happen. It were better therefore, that when virgins are about to marry, they would fix their wedding day at least six or seven days after the menses, have done flowing.

But farther, nature hath given greater desires after enjoyment to some than to others, and such though they abstain from enjoyment, yet so great is their desire after it, that they may break the Hymen of *Claustum Virginalé*; and sometimes it itches to that degree, that they put in their finger and so break it. Sometimes the midwives break it in the birth; and sometimes it is done by stoppage of urine, coughing, violent straining, or sneezing; so that no bleeding at the first penetration of the husband, is not always a sign of unchastity, or that another has been there before him, seeing that the Hymenean membrane may be broke so many other ways; but where bleeding does flow, it is an undeniable token that the person was a virgin and never knew

man before. And indeed though the Hymen may be broke all these ways mentioned, yet it so rarely happens to be broke any other way, that Leo Africanus makes mention of it as a general custom of the Africans at their weddings, that, the marriage ceremony being over, the bride and the bridegroom are shut up in a chamber, while the wedding dinner is preparing; an ancient woman stands at the door to receive from the bridegroom a sheet, having the bloody token of the wife's virginity, which she shews in triumph to all the guests, and then they feast with joy; but if there is no blood seen, the bride is to be sent home again to her friends with disgrace, and the disappointed guests go home without their dinner.

There are others, that make the straitness of the privities a sign of virginity, but this is a very uncertain rule; for this depends much upon the age, habit of body, and other circumstances. But though women who have used carnal copulation, are not so strait as virgins, yet this cannot be a certain argument of virginity, because the privities may be made strait by the use of astringent medicines. I have heard of a courtesan, who, though she had been married, gave herself out to be a virgin, and by the help of a bath of comfrey roots, deceived those with whom she had to do.

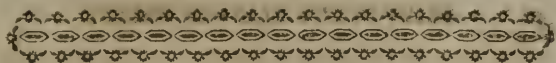
Others judge of lost virginity, by milk in the breast: but such perhaps, are ignorant that there is a two-fold milk; the one of virgins, the other of such as have conceived or brought forth children; that of virgins as a malady contrary to nature, made of blood from the womb; turned into milk by the faculty of the breasts; the other is natural, where there is a child either in the womb, or born; yet the milk, though both are white, differs very much, both in respect to the blood, and diversity of veins that bring it to the breasts; and that of virgins is thinner, less in quantity and not so sweet: therefore, if virgins happen to have such milk, they are not for that reason to be reckoned unchaste.

Upon the whole, the sum of what I have said upon this head of virginity, terminates in this, that when a

man is married, and finds the tokens of his wife's virginity, upon the first act of copulation, he has all the reason in the world to believe her such ; but if he find them not, he has no reason to think her divirginated, if he finds her otherwise sober and modest ; seeing the Hymen may be broken so many other ways, and yet the woman both chaste and virtuous. Only let me caution virgins to take all imaginable care to keep their virgin zone entire, that so when they marry, they may be such as the great Cæsar wished his wife to be, not only without fault, but without suspicion also.

Thus have I virgin innocence survey'd,
And shew'd the difference betwixt wife and maid,
And that their chastity they need not fear,
Whose virgin token plainly doth appear,
Nor censure those in whom they do not see,
Unless the contrary they plainly know,
For they may yet unspotted virgins be,
Although their virgin tokens none can see.





PART II.

The Secrets of Nature displayed in the Production of Man.

CHAP. I.

What Conception is ; what is pre-requisite thereto ; how a woman may know whether she hath conceived, and whether a boy or girl.

SECT. I. *Of Conception, what it is, &c.*

HAVING, in the first part of this work, described the instruments of generation in both sexes, and the use for which those instruments were intended by nature, I shall in the part before me, proceed to shew what conception is ; the signs and tokens thereof, and what are the pre-requisites thereunto : For when once a woman has conceived, the work of generation is begun ; time, with nature's help, will perfect the work.

Now in conception, that which is first to be regarded, and without which it cannot be, is the seed of the man, that being the active principle, or efficient cause of the foetus, the matter of which is arterial blood, and animal spirits, which are elaborated into feed in the testicles, and from thence by proper vessels conveyed into the yard, and in the act of copulation, it is injected or emitted into the womb. The next thing is the passive principle of foetus (for there must be both in order to conception) and this is an ovum, or egg, impregnated by the man's seed, or being conveyed to it, the womb closes up, that no air may enter therein, but the impregnated ovum may swell into a foetus. This is that which is truly and properly conception, and the pre-requisites thereunto I shall make the subject of the next section,

SECT. II. *Of the Pre-requisites to Conception.*

I HAVE shewn in the former section, that there are two things to be regarded chiefly in conception, to wit, the active and passive principle. This in part shews, that difference of sexes is a pre-requisite to conception. So nature has ordained, there must be a proper vehicle for the active principle to be conjected thereinto, and there also must be a passive principle to be impregnated thereby, so the woman has no active principle to impregnate, and therefore without different sexes, there can be no conception.

But this is not all; for it is not enough that there be different sexes, but these different sexes must unite, and there must be coition, in order to conception; and it is coition, or the mutual embraces of both sexes, which nature has made so desirable to each other; which when authorised in the way that heaven has ordained, there is no need of ravishing; for the fair bride will quickly meet the bridegroom with equal vigour. But since it is that there may be overdoing, and such errors committed by their giving way to the impetuosity of their desires, as may be prejudicial to conception, it will not be amiss to give some directions to make this operation the more effectual.

SECT. III. *A word of Advice to both Sexes; or directions respecting the act of Coition, or carnal Copulation.*

THOUGH there are some that desire not to have children, and yet are very fond of nocturnal embraces, to whom these directions will be no way acceptable, because it may probably produce those effects which they had rather be without; yet I doubt not but the generality of both sexes, when in a married state, have such a desire to produce the fair image of themselves, that nothing can be more welcome to them than these directions that may make their mutual embraces most

effectual to that end: and therefore let none think it strange that we pretend to give directions for the promoting that which nature itself teacheth all to perform; since it is no solecism for art to be a handmaid to nature, and to assist her in her noblest operation. Neither is it the bare performing of that act which we here direct to, but the performing it so as to make it, conducive unto the work of generation. And since this act is the foundation of generation, and without which it cannot be, some care ought to be taken, and, consequently, some advice given, how to perform it well; and therein I am sure the proverb is on our side, which tells us, that what is once well done, is twice done. But yet what we shall advance on this nice subject, shall be offered with such caution, as not to give offence to the chaste ear, nor shall put the fair sex the trouble of blushing. What I shall offer will consist of two parts, First, Something previous to it; and Secondly, Something consequential to it.

For the first, when married persons design to follow the propensions of nature for the production of the fair image of themselves, let every thing that looks like care and business be banished from their thoughts, for all such things are enemies to Venus; and let their animal and vital spirits be powerfully exhilarated by some brisk and generous restoratives; and let them, to invigorate their fancies, survey the lovely beauties of each other, and bear the bright ideas of them in their minds: and if it happens, that instead of beauty there is any thing that looks like imperfection or deformity (for nature is not alike beautiful to all) let them be covered over with a veil of darkness and oblivion. And since the utmost intention of desire is required in this act, it may not be amiss for the bridegroom for the more eager heightening of this joy, to delineate the scenes of their approaching happiness to his fair languishing bride, in some such amorous rapture as this:

Now, my fair bride, now will I storm the mint
Of love and joy, and rife all that's in't.

Now, my enfranchis'd hand on every side,

Shall o'er thy naked polish'd ivory slide,
 Freely shall now my longing eyes behold,
 Thy bared snow and thy undrained gold :
 Nor curtain now, tho' of transparent lawn,
 Shall be before thy virgin treasure drawn.
 I will enjoy thee now my fairest, come,
 And fly with me to love's elysium,
 My rudder with thy bold hand, like a try'd
 And skilful pilot, thou shalt steer and guide,
 My bark in love's dark channel, where it shall
 Dance, as the bounding waves do rise and fall ;
 Whilst my tall pinnace in the Cyprian streight,
 Rides safe at anchor and unlades the freight.

Having by these, and other amorous acts (which love
 can better dictate than my pen) wound up your fancies
 to the highest ardour and desires.

Perform these rights nature and love requires,
 'Till you have quench'd each others am'rous fires.

When the act of coition is over, and the bridegroom
 has done what nature prompted him to do, he ought to
 take care not to withdraw too precipitately from the
 field of love, lest he should, by so doing, let the cold in-
 to the womb, which might be of dangerous consequence.
 But when he has given time for the matrix to close up,
 he may withdraw, and leave the bride to her repose,
 which ought to be with all the calmness possible, betak-
 ing herself to rest on the right side, and not removing,
 without great occasion till she has taken her first sleep.
 Coughing and sneezing, if possible should be avoided,
 or any thing that agitates or causes a motion of the body.
 These amorous engagements should not be often repeat-
 ed till the conception is confirmed. And it may not be
 amiss to remind the bridegroom, that the fair lasts all
 the year, and that he should be careful not to spend his
 stock lavishly, as women, in general, are better pleased
 in having a thing once well done, than often ill done.

SECT. IV. *How a Woman may know when she has conceived.*

AFTER the means made use of in order to conception, according to the directions given before, there is reason to expect that conception should follow : but as things do not always succeed according to desire, so therefore conception does not always follow upon coition. For there are many women, especially those newly married, who know not whether they have conceived or not, after coition ; which, if they were assured of, they might and would avoid several inconveniences which they now run upon. For, when after conception a woman finds an alteration in herself, and yet knows not from whence it arises, she is apt to run to the doctor, and inquire of him what is the matter, who not knowing that she is with child, gives her a strong potion, which certainly destroys the conception. There are others, who out of foolish bashful coyness, though they know that they have conceived, yet will not confess it, that they may be instructed how to order themselves accordingly. Those that are coy may learn in time to be wise ; and for the sake of those that are ignorant, I shall set down the signs of conception that women may know thereby, whether they have conceived or not.

If a woman hath conceived, the vein under her eye will be swelled, i. e. under the lower eye-lid, the vein in the eyes appearing clearly, and the eyes something discoloured ; if the woman hath not her terms upon her, nor hath watched the night before, there is a certain sign of her having conceived ; and this appears most plainly just upon the the conception, and holds for the first two months after.

Stop the urine of the woman close in a glass or bottle three days, at the expiration of which time strain it through a linen rag : if you perceive small living creatures in it, you may instantly conclude that she hath conceived ; for the urine, which was before part of her own substance, will be generative as well as its mistress,

A coldness and chilness of the outward parts after copulation shews a woman to have conceived, the heat being retired to make the conception; and then the veins of the breasts are more clearly to be seen than they were before. The tops of the nipples look redder than formerly; the body is weakened, and the face discoloured, the belly waxeth very fat, because the womb closeth itself together to nourish and cherish the seed. If she drinks cold water, a coldness is felt in the breast; she has also loss of appetite, sour belchings, and exceeding weakness of the stomach; the breasts begin to swell, and wax hard, not without pain or soreness; wringing or griping pains, like the cramp, happens in the belly above the naval: also divers appetites and longings are engendered. The veins of the eyes are also clearly seen, and the eyes seem something discoloured, as a looking-glass will shew. The excrements of the guts are voided painfully, because the womb swelling, thrusteth the right gut together: likewise let her take green nettle, and put it into her urine, cover it closely, and let it remain all night; if she is with child, it will be full of red spots on the next morning, if she is not with child, it will be blackish.

By these experiment, some of which never fail, a woman may know whether she hath conceived or not, and to regulate herself accordingly. For,

When women once with child conceived are,
They of themselves should take especial care.

SECT. V. *How to know whether a Women be conceived of a Male or Female Child.*

IN the present section I shall endeavor to gratify the curiosity of many persons who are very desirous to know whether they are conceived of a male or female. For the satisfaction of such, I shall give the sign of a male child being conceived, and the reverse thereof, that of a female.

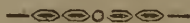
It is then a sign of a male child, when the woman feels it first on the right side; for the male children

lie always on that side of the womb, the woman also when rising from her chair, doth sooner stay herself upon the right hand than on the left. Also the belly lies rounder and higher than when it is a female. The colour of the woman is not so swarthy, but more clear than when it is a girl. The right side is likewise more plump and harder than the left, the right nipple redder. She likewise breeds a boy easier and with less pain than a girl, and carries her burthen not so heavily, but is more nimble and stirring.

I will only, as to this, add the following experiments, which I never knew fail. If the circle under the woman's eyes, which is of a wan blue colour, be more apparent under the right eye, and that most discoloured, she is with child of a boy; if the mark be most apparent in her left eye, she is with child, with a girl.—The other is, let her drop a drop of her milk in a basin of fair water, if it sinks to the bottom as it drops in, round in a drop, it is a girl she is with child of; for, if it be a boy, it will spread and swim at top. This I have often tried, and it never failed.

For whether male or female child it be,

You have conceived, by these rules you'll see.



CHAP. II.

SECT. I. *How a Woman should order herself, in order to Conception.*

I AM very well satisfied that many women desire copulation, not from any delight or satisfaction they take therein, more than as it is the means appointed by Him that bid us increase and multiply, for the obtaining of children, and the propagation of mankind. And though several make use of coition to obtain that end, yet we find by experience, that in many, it does not succeed, because they order not themselves as they ought to do; for though it must be granted, that all our endeavours depend upon the divine blessing, yet if we are wanting in

any thing to ourselves, how can we expect that blessing, to succeed our endeavours ? My business therefore in this section, shall be to shew how women that desire to have children should order themselves.

First, Women that are desirous to have children, must, in order thereunto, give themselves to moderate exercise : for want of exercise, and idleness, are very great enemies to the work of generation, and indeed are enemies both to soul and body. Those that shall give themselves the trouble to observe it, will find those city dames that live high, and do nothing, seldom have children ; or if they have, they seldom live ; whereas, those poor women, that accustom themselves to labour, have many children and those strong and lusty. Nor need we wonder at it, if we consider the benefit that comes by a moderate exercise and labour ; for it opens the pores, quickens the spirits, stirs up the natural heat, strengthens the body, senses, and spirits, comforts the limbs, and helps nature in all her exercises, of which procreation of children is none of the least.

Secondly, Women, in order to conception, should avoid all manner of discontent, and the occasion of it ; for discontent is a great enemy to conception, and it so dispirits either man or woman, that it hinders them from putting forth that vigour, which ought to be exerted in the act of coition. When on the contrary, content and satisfaction of mind dilate the heart and arteries, whereby the vital blood and spirits, are freely distributed throughout the body ; and thence arise such affections, as please, recreate and refresh the nature of man, as hope, joy, love, gladness, and mirth. Nor does it only comfort and strengthen the body, but also the operation and imagination of the mind ; which is so much the more necessary, inasmuch the imagination of the mother works forcibly upon the conception of the child. Women, therefore, ought to take great care that their imagination be pure and clear, that their child may be well formed.

Thirdly, Women ought to take care to keep the womb in good order ; and to see that the menses come down as they ought to do : for if they are discoloured,

they are out of order. But if the blood comes down pure, then the woman will be very prone to conceive with child, especially if they use copulation in two or three days after the monthly terms are stayed.

Fourthly, A woman that would conceive, should observe that she does not use the act of coition too often; for satiety glues the womb, and renders it unfit for its office. There are two things demonstrates this; i. e. that common whores (who often use copulation) have never, or very rarely any children: for the grass seldom grows in a path that is commonly trodden. The other is, that women, whose husbands have been long absent, do, after copulation with them again conceive very quickly.

Fifthly, Care should be taken that the time of copulation be convenient, that there may be no fear of surprize: for fear hinders conception. And then it were the best also that the desire of copulation be natural, and not stirred up by provocation: and if it be natural, the greater the woman's desire of copulation is, the more likely she is to conceive.

I will add no more, but what some authors report, that a loadstone carried about a woman, not only causeth conception, but concord between man and wife; if it be true, I would have no married woman go without one, both for her own and husband's quiet.

Let all the fair, who would have children from
 Their soft embraces, read what's here laid down;
 Those that to exercise themselves incline,
 And in their love to be content design,
 Who have their monthly terms in order flow,
 And regulate them if they do not so;
 That love's embraces moderately use,
 And to enjoy them a fit season chuse;
 These may, content with what they've done remain,
 And need not fear their wishes to obtain.

SECT. II. *What a Woman ought to observe after conception.*

AFTER a woman has conceived, or has reason to think so, she ought to be very careful of herself, lest she should do any thing that might hinder nature in her conception. For in the first two months after conception women are very subject to miscarriages, because then the ligaments are weak and soon broken. To prevent this, let the woman every morning drink a draught of sage ale, and it will do her abundance of good. And if signs of abortion or miscarriage appear, let her lay a toast dipped in rent (in case muscadell cannot be gotten) to the navel, for this is very good. Or, let her take a little green tansy, and having bruised it, sprinkle it with muscadell, and apply it to the navel, and she will find it much better. Also tea infused in ale, like sage ale, and a draught drunk every morning, is most excellent for such women as are subject to miscarriages. Also take juice of tansy, clarify it, and boil it up into a syrup, with twice its weight in sugar, and let a woman take a spoonful or two of it in such cases, and it will be an excellent preservative against miscarriages. Also, if she can, let her be where the air is temperate. Let her sleep be moderate; let her also avoid all watching and immoderate exercise, as also disturbing passions, loud clamours, and stinky smells; and let her abstain from all things which may provoke either urine or the courses, and also from all sharp and windy meats; and let a moderate diet be observed. If the excrements of the guts be retained, lenify the belly with clysters made of the decoction of mallows and violets, with sugar and common oil; or make broth of borage, bugloss, beets, mallows, and take therein a little manna; but on the contrary, if she be troubled with a looseness of the belly, let it not be stopped without the judgment of a physician; for that matter all uterine fluxes have a malignant quality, and must be evacuated and removed before the flux be stayed.

C H A P. III.

How the Child lieth, and how it groweth up in the Womb of the Mother after Conception.

SECT. I. *How the Child is formed in the Womb after Conception.*

AS to the formation of the Child, it is to be noted, that after coition, the seed lies warm in the womb for six days without any visible alteration, only the womb closes up itself to prevent its issuing forth again, and for the securing it from any cold; and all this time it looks like butter, or coagulated milk. And it would be necessary for her who has conceived, to forbear the embraces of her husband all the time, lest the conception should be spoiled. In three days after, it is altered from the quality of thick milk or butter, and becomes blood, or at least resembles it in colour; nature having now began to work upon it; in the next six days following, that blood begins to be united into one body, grows hard and becomes a little quantity, and to appear a round lump. And, as in the first creation the earth was void, and without form, so in this creating work of divine power in the womb; in this shapeless embryo lies the first mass. But in two days after the principal members are formed by the plastic power of nature, and these principal members are four in number, viz. the heart, the brain, the liver, and the testicles, or stones. Three days after, the other members are formed, and are distinguished from the shoulders to the knees, and the heart, liver and stones, with their appurtenances, do grow bigger and bigger. Four days after that the several members of the whole body appear, and as nature requires, they conjunctly and severally do receive their perfection. And so in the appointed time, the whole creation hath that essence which it ought to have in the perfection of it, receiving from God a living soul, therewith putting in its nostrils the breath of life. Thus I have shewn the

whole operation of nature in the formation of the child in the womb, according to the energy given it by the divine Creator, Maker, and Upholder of all things, both in heaven and earth.

By some others more briefly, but to the same purpose, the forming of the child in the womb of its mother is thus described: three days in the milk, three in the blood, twelve days from the flesh, and eighteen the members, and forty days afterwards the child is inspired with life, being endowed with an immortal living soul.

SECT. II. *Of the Manner of the Child's lying in the Womb from the Conception to the Birth.*

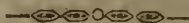


I COME now to shew in what manner the child lieth in the womb of its mother, whilst it is confined in the dark recesses ; first giving the reader the testimony of two or three of the most learned on this head.

The learned Hippocrates affirms, that the child, as he is placed in the womb, hath his hands upon his knees, and his head bent to his feet ; so that he lies round together, his hands upon his knees, and his face between them ; so that each eye touches each thumb, and his nose betwixt his knees. And of the same opinion in this matter was Bartholinus, the younger. Columbus is of opinion, that the figure of the child in the womb is round, the right arm bowed, the fingers thereof under the ear, above the neck, and the head bowed, so that the chin toucheth the breast, the left arm bowed above the breast and face, and propped up by the bending of the right elbow ; the legs are lifted upwards the right of which is so lifted up, that the thigh toucheth the belly, the knees, the navel, the heel toucheth the left buttock, and the foot is turned back and covereth the secrets ; the left thigh toucheth the belly, and the leg lifted up to the breast, the back lying outwards.

Thus the reader may see how authors differ herein ; but this ought to be noted, that the different positions which the child hath been seen in, hath given occasion to the different opinions of authors. For when the woman is young with child the embryo is always of a round figure, a little oblong, having the spine moderately turned inwards, the thighs folded, and a little raised, to which the legs are joined, that the heels toucheth the buttocks, the arms bending, and the hands placed upon the knees, towards which the head is inclining forwards so that the chin touches the breast ; the spine of the back is at that time placed towards the mother's, the head uppermost, the hands forwards, and the feet downwards, and proportionable to its growth it extends its members by little and little, which were exactly formed in the first month. In this posture it usually keeps till the seventh or eighth month, and then by a natural propensity and disposition of the upper parts of the body, the head is turn-

ed downwards toward the inward orifice of the womb, tumbling as it were over its head; so that the feet are uppermost, and the face towards the mother's great gut. And this turning of the infant in this manner with his head downwards towards the latter end of a woman's reckoning is so ordered of nature, that it may be the better disposed for the birth. The knowledge of these things being so essential to the practice of a midwife, I could not omit them.



C H A P. IV.

Of the Obstructions of Conception; with the Cause and Cure of Barrenness, and the Signs of Insufficiency both in Men and Women.

BEFORE I proceed any further, it is highly necessary that I treat of the obstructions of conception, which naturally leads me to treat of barrenness, the grand obstruction of conception.

SECT. I. *Of Barrenness.*

BARRENNESS is a natural and accidental defect, which hinders conception: for that which hinders conception, causeth barrenness. There are several causes why conception may be hindered; as too much heat or cold dries up the seed, and makes it corrupt; this extinguishing the life of the seed, and that making it watery, and unfit for generation. It may be caused also by the stoppage or overflowing of the courses, and by swellings, ulcers, and inflammations of the womb, or by an excrescence of flesh growing about the mouth of the matrix, whereby the seed is hindered from being injected into the womb; and want of love in the persons copulating may also hinder conception, as is apparent from

those women that are deflowered against their will ; no conception following any forced copulation. *

And here let me caution parents against one thing that often causeth barrenness, which might easily be prevented ; and that is, against letting virgins blood in their arm before their courses come down ; these come down in virgins usually in the 14th year of their age, seldom before the 13th, but never before the 12th. Now, because usually a young virgin is out of order before they first break down, the mother goes with her to the doctor, who finding that fulness of blood is the occasion of her illness, orders her to be let blood in the arm ; upon which she becomes well for a time, the superfluous blood being taken away ; and this remedy, which is worse than the disease, being repeated four or five times, the blood comes not down at all to the womb, as it doth in other women, but dries up, and is for ever barren ; whereas, had she been let blood in the foot, it would have brought the blood downwards, and so have provoked the terms, and prevent mischief.

Another cause of barrenness is, for want of convenient moderate quality, which the woman ought to have with the man : as, if he be hot she must be cold ; if he be dry, she moist : but if they both are dry, or both of a moist constitution, they cannot propagate, though in this case neither of them may be barren, singly considered ; for he or she though now as barren as the barren fig-tree, yet joined, with an apt constitution, may become as fruitful as the vine.

Another cause of barrenness may be the disuse of copulation ; for some there are of that frigid constitution, that they either use not the means at all, or else perform it with so much languor and coldness, that it is not likely it should prove efficacious ; for the act of coition should be performed with the greatest ardour and intenseness of desire imaginable, or else they may as well let it alone ; a frigid disposition being the effect of a cold distemper, and must be cured by such things as heat and nourish. For,

Without good drink and feeding high
Desires of Venus soon will die.

Such therefore ought to feed upon cock-stones and lamb-stones, sparrows, partridges, quails, and pheasants, eggs, for 'tis an intallible aphorism in physick, that whatsoever any creature is extremely addicted to, they operate to the same end by their mutual virtue in the man that eats them. Therefore partridges, quails, sparrows, &c. being extremely addicted to venery, they work the same effect in those who eat them; and this likewise is worthy to be noted, that in what part of the body the faculty is strong, as a medicine: as for instance, the virtus procreativus lies in the testicles: therefore cock stone, &c. are medicinal in this distemper. Let such persons also eat such food as is very nourishing as parsnips, asfanders, skiffs, and pine nuts: and let them take a dram of diasatryon in an electuary every morning. The stones of a fox dried to powder, a dram taken every morning in tent, is also very good in this case: and so also is a dram of satyryon root taken in like manner.

SECT. II. *Of the Signs of Insufficiency in Men; and Barrenness in Women.*

AFTER married people have lived long together, and both seem likely, and yet neither of them have children, there often arises discontent between them, and both are troubled because they know not on what side the fault is. And though authors have left several ways to know whether the man or woman be defective, yet because I cannot coincide in their judgments, I shall pass them by in silence, and rather lay down a few rules that may be depended upon, than many that are uncertain. But I must first premise, that women are subject to so many infirmities more than men, that the cause of barrenness is oftener on their side than the man's. For, if the man has the instrument of generation perfect, being in health, and keeping a regular and temperate

diet and exercise, I know no accidental cause of barrenness in him : whereas the cause of barrenness in a woman, lies in her womb, and the infirmities incident thereunto : some of which are the stopping of the menstrua, or their overflowing ; as also the falling out thereof, and the inflammation, windiness, heat, and dryness thereof, for each of which we will prescribe proper cures.

But to be more particular.

If a man or woman, in whom the instruments of generation appear no ways defective, would know whether the cause of barrenness be in themselves or their bed-fellow, let them take a handful of barley, or any other corn that will grow quickly, and steep half of it in the urine of a man, and the other half in the urine of a woman, during the space of twenty-four hours. Then take it out, and set it, the man's by itself, and the woman's by itself, in a flower-pot, or something else, where you may keep them dry. Then water the man's every morning with his own urine, and the woman's with her's ; and that which grows the most fruitful ; and that which does not grow denotes the person barren. Nor let any despise this trial : for, seeing physicians will by urine undertake to tell a person of his or her diseases, why should not urine also shew whether a person be fruitful or not ? But if in a man the instrument of generation is not perfect, it will be obvious to the sight, if the yard be so feeble, that it will not admit the erection, it can never convey the seed into the womb, nor can there be in such a case any conception. But this is so plain and easily discerned, that it needs must be obvious to both parties, and the man who finds himself debilitated, ought not to marry.

The case can't be so bad with the woman, though she be barren, but what her husband may make use of her, unless she be impenetrable, which (though it sometimes does) yet but rarely happens : and therefore the man is the most inexcusable if he transgress.

Beside what I have already mentioned, signs of barrenness in women are ; if she be of an over-hot constitution, of a dry body, subject to anger, hath black hair, a thick

pulse, her purgations flow little, and that with pain, and yet hath a violent desire to coition; but if she be of a cold constitution, then are the signs contrary to those recited. If barrenness be caused through an evil quality of the womb, it may be known by making a fumigation of red florax, myrrh, cassiawood, nutmeg, cinnamon, and letting her receive the fume of it in her womb, covering her very close. If the odour passeth through the body up into the mouth and nostrils, she is fruitful. But if she feel not the same in her mouth and nose, it denotes barrenness one of these ways, viz. That the seed is either through cold extinguished, or through heat dissipated. And if a woman be suspected to be unfruitful, cast natural brimstone, such as is digged out of the mine, into her urine, and if worms breed therein, she is fruitful. But this shall suffice to be said of the causes and signs of barrenness, and it is now time to proceed to the cure.

SECT. III. *Of the cure of Barrenness.*

IN the cure of barrenness, respect must be had to the cause: for the cause must be first removed, and then the womb strengthened, and the spirits of the seed enlivened by corroborating applications.

If barrenness proceeds from over-much heat, let her use inwardly, succory, endive, violets, water-lillies, sorrel, and lettuce, white syrups and conserves made thereof, thus.

Take conserve of borage, violets, succory, water-lillies, of each one ounce, half an ounce of conserve of roses: diamagarition frigid, piatrion, sancalon, of each half a dram; with syrup of violets, or juice of citron, make an eluctuary.

Let her also take of endive, water-lillies, borage flowers, of each a handful, rhubarb, myrobalans, of each three drams; with water make a decoction; add to the straining, the syrup relaxative of violets, one ounce, syrup of cassia, half an ounce, manna three drams; make all into a portion. Take of the syrup of mugwort, one ounce,

syrup of maiden hair, two ounces, pulv. elect. trionfar, make all up into a julep. Apply to the reins and privities, fomentations of the juice of lettuce, violets, roses, mallows, vine-leaves, and night-shade; let her also anoint her secret parts with the cooling ointment of galls. Baths are good for her to sit in. Let the air be clear, her garments thin, her food lettuce, endive, succory and barley; but let her have no hot meats, nor strong wines, except it be waterish and thin. Rest is good for her both in body and mind; but she must use but little copulation, but may sleep as much as she will.

If barrenness be occasioned by the predominancy of cold extinguishing the power of the seed, which may be known by her desiring venery, and receiving no pleasure in the act of copulation, even while the man is spending his seed: her terms are phlegmatic, thick, slimy, and flow not rightly: in this case let her take syrup of calamint, mugwort, betony, of each one ounce; water of pennyroyal, feverfew; hyssop, sage, of each two ounces; and make a julep. Let her take every morning two spoonfuls of cinnamonwater, with one scruple of mithridate. Also let her take the oil of anniseed, one scruple and a half, jessamine, diachylon both, dinosch, diaglang, of each one dram; sugar four ounces: with water of cinnamon make lozenges, and take of them a dram and a half twice a day, two hours before meals. Let her also fasten cuppingglasses to her hips and belly, and let her take florax calamita one ounce: mastich, cloves, cinnamon, nutmeg, lignum aloes, frankincense of each half an ounce, musk ten grains, ambergrease half a scruple, with rose water make a confection; divide it into four parts, of one make a pomum odoratum to smell to, if she be not hysterical: of the second make a mass of pills, and let her take three every night; of the third make a pessary, and put it up; of the fourth make a fumigation for the womb.

If barrenness arises from the faculties of the womb being weakened, and the life of the seed suffocated by over much humidity flowing on those parts, let her take of

betony, marjoram, mugwort, pennyroyal, balm, of each one handful; root of onrum, fennel, elecampane, of each two drams; anniseed, cummin-seed, of each a dram, with sugar and water a sufficient quantity, of which make a syrup, and take three ounces every morning: Then purge with these pills following, take of pil. ext. two scruples: diagridion two grains, species decaflor one scruple; make them up into nine pills with syrup of mugwort. Also take spec. diagminæ, diamoschi, diambræ, of each one dram; cinnamon one dram and a half; mace, cloves, nutmeg, of each half a dram; sugar six ounces, with water of feverfew: make lezenges to be taken every morning. Likewise let her take of the decoction of sarsaparilla and viga aurea, with a good quantity of sage, which is an herb of that virtue, that Cornelius Agrippa honored it with the title of sacra herba, a holy herb: and Dodonæus in his history of plants, reports, that after a great plague had happened in Egypt, which had almost depopulated the country, the surviving women were commanded to drink the juice of sage, that they might multiply the faster. Let her anoint her genitals with the oil of anniseed and spikenard.—Trenchicks to smoothe the womb are also very good. To make which, let her take mace, nutmeg, cinnamon, storax, amber of each one dram; cloves, laden, of each half a dram; turpentine, of a sufficient quantity. Lastly, take the roots of valerian and elecampane, of each one pound; of galangal three ounces; organ, marjorum, betony, mugwort, bay leaves, calamint, of each three handfuls; with water make an infusion, in which let her sit after she has had her courses. But to proceed.

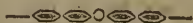
If barrenness be caused by the dryness of the womb consuming the matter of the seed, let her take every day almond milk and goat's milk, extracted with honey; eat often of the root Satyrion candied, and of the electuary of diasatyrion. Let her also take three sheep's heads, and boil them till the flesh comes from the bones; then take of melilot violets, camomile, mercury, orchies, with the roots of each, one pound: Fenugreek, linseed, valerian roots, of each a handful; let all these be decoct.

ed in the aforeſaid broth, and let the women ſit in the decoction up to the navel. Alſo, take of deer's ſuit half an ounce; cow's marrow, ſtyracis liquidæ, of each a dram; or of ſweet almonds, two ounces; with ſilk or cotton make a peſſary, and make injections, only of freſh butter and oil of ſweet almonds.

It ſometimes happens that barrenneſs is cauſed by re-miſſaels in the manner of the act of coition: and though there be no impediment on either ſide, yet if both ſexes meet not the act with equal vigour, no conception follows: for many times the man is too quick for the woman, or rather the woman too ſlow for the man, and is not prepared to receive the ſeed with that delight which ſhe ought, when it is emitted by the man; and thoſe who follow the opinion of the ancients, that the woman contributes ſeed in the formation of the child as well as the man, are of opinion that there ought to be a joint emission both of the man and woman at the ſame inſtant, which, adminiſtering to both a very great delight, perfects the work of conception. But if in this caſe the woman be ſlack, it will be proper for the man to follow the advice given in chap. III. ſect. 2. where both ſexes are ſhewn how to manage themſelves in the act of coition, that ſo by ſtirring up in the woman a deſire to venery, ſhe may meet his embraces with the greateſt ardour. If this ſhould prove ineffectual, let her before the act of coition ſoment the privities with the decoctions of betony, ſage, hyſop, and calamint, anoint the mouth and head of the womb with muſks and civet; and the cauſe of barrenneſs being removed, let the womb be corroborated by the following applications:

Make of bay-berries, maſtick, nutmeg, frank incenſe, cypreſs nuts, zadam, galbani, of each one dram: ſtyracis liquidæ, two ſcruples; cloves, half a ſcruple; amber-greaſe, two grains; muſk, ſix grains; then with oil of ſpikenard make a peſſary. Alſo take red roſes with frankincenſe, lapidis hæmatatis, of each half an ounce; ſanguis draconis, fine hole maſtick, of each two drams; nutmeg, cloves, of each one dram; ſpikenard half a

scruple, and with oil of wormwood make a plaister for the lower part of the belly. And let her eat of erringo roots candied, and make an injection of the juice of the roots of statyrien; and then let her use copulation soon after the menses are ceased, conception being most apt to follow; for then the womb is thirsty and dry, and aptest both to draw the seed, and to retain it by the roughness of the inward superficies. A woman should be careful to avoid excess in all things, as being the greater enemy to conception. For, should a woman conceive under care, study, &c. the child will probably be foolish, because the animal faculties of the parents were confused.



C H A P. V.

How Women ought to govern themselves,
during their Pregnancy.

FIRST, let a woman that is with child chuse a temperate air, not infected with fogs, and for that reason, not near any marshy grounds, rivers, &c. But this cannot be avoided by some, their habitation falling out to be in such places. But those who can live where they please ought to avoid such places; as likewise the going abroad in too hot or cold weather; also when the south wind blows hard, for, that often proves hurtful to women with child, and sometimes causes abortion.

Secondly, she ought also to be very cautious in the matter of her diet, chusing only those means that create wholesome nourishment, and such as are immoderately dry; and let her take care to prevent and avoid immoderate fasting, for that will weaken the infant, and render it of a sickly constitution, and sometimes cause abortion. And as all accesses are to be avoided; so she must take care not only of avoiding immoderate fasting but likewise immoderate eating too, which will not only be apt to stuff the child, but to swell it up to that de-

gree, that will endanger the life of itself and the mother in the birth. Let it suffice that in general she avoids all meats which are too hot, or too cold and moist ; such as sallads, spices and hot meats, which often causes the child to be born before its time ; and sometimes without nails, which foreshews a short life. And therefore in this case, the most wholesome meats are pigeons, partridges, pheasants, larks, veal, mutton, or any meat that yields a good juice, and contributes kindly nourishment ; as also such fruits as are sweet and of easy digestion, as cherries, pears, damsons, and the like. But let her avoid, as pernicious, all such things as cause and create wind.

Care ought also to be taken with respect to her exercise ; which ought to be moderate ; for violent motion, either in walking, or working, is hurtful and disturbing to the womb ; especially riding upon the stones in a coach, or any other uneven place : and in the like manner, all extraordinary sounds and noises should be avoided, especially the ringing of bells ; and the discharging of great guns : neither ought she to give way to either immoderate laughing or weeping, or to anger, or any other passions, for that may be prejudicial to her.

SECT. II. *Further Rules for Women, to observe during their Pregnancy.*

THOUGH the act of coition is that without which conception cannot be, yet the immediate use of it hinders the chief end for which it was designed. In the first four months after conception, she ought not to lie with her husband, at least sparingly, lest, by shaking the womb in that action, the courses should again be forced down. In the fifth and sixth months she ought also to abstain ; but in the seventh, eighth, and ninth, it may freely be permitted, by reason it opens the passage, and facilitates the birth. To contribute the better towards which, the women should be careful to keep her body soluble ; syrups, and other opening things, being very hurtful to nature in those operations. Let her not lace

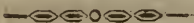
too close, lest the child be thereby hindered from coming to its full growth.

To prevent any disorder that may happen to her breasts by too much blood, which will cause cordled milk, let her wear a necklace of gold about her neck, or rather a small ingot of steel between her breasts, fermenting them a quarter of an hour every morning, with water distilled from ground ivy, periwinkle and sage being blood warm.

When her belly is swelling, and the motion is great, which will be about the fourth month, she may swathe it with a swath band, anointed with a pomatum, or any other thing of that kind, to keep it smooth, and free from wrinkles. For which end it will be best to take off the caul of a kid, and of a sow, of each three ounces; capon grease and goose grease, of each one ounce and a half; and having melted them all together, put thereto a quarter of a pint of water; after which strain them through a linen cloth into fair water, casting it to and fro therein till it be white; at which time add to it of marrow of a red deer one ounce, and lay in red rose water, twelve hours: After the expiration of which you may use it anointing the swathe and belly.

But if these ingredients are not easy to be had, you may make use of the following liniment, which will do almost as well as the other: take of mutton suet (that which grows about the kidneys is best) and of dog's grease, of each two ounces, whale oil, one ounce, and oil of sweet almonds, the same quantity; wash them well, after they are melted together in the water of germander, or new white wine, and anoint the belly and swathe therewith. Those that care not to anoint their bellies may make use of the following bathe or decoction: take of all sorts of mallow, and mother wort, each two handfuls; white lilly roots three ounces; melilot and camomile, of each two handfuls; lime seeds, quince seeds and fenugreek seeds, three ounces, boil them well in spring water, and bathe therewith. If the woman, after her quickening, finds but little motion of the infant in her womb, let her make a quilt in the manner following.

and bind it up the navel, and it will much strengthen and comfort the infant ; take the powder of roses, red coral, and jelly flowers, of each two ounces ; mastich a dram, angelica seeds two drams, amber grease two grains, and musk two grains ; all which being well beaten, put them into a linen bag, spread them abroad and quilt it, that they may be in every part of it, placing it upon the navel, and it will have the desired effect. These things are sufficient to observe during the time of their pregnancy, that neither child nor mother may miscarry, but be brought to the birth at the appointed time.



C H A P. VI.

Directions for the Midwives how to assist Women in the time of their labour ; and how Child-bearing Women should be ordered in time of their lying in.

SECT. I. *How a Midwife ought to be qualified.*

A MIDWIFE ought to be of a middle age, neither too old nor too young, and of a good habit of body, not subject to diseases, fears, or sudden frights ; nor are the qualifications assigned to a good surgeon improper for a midwife, viz. a lady's hand, a hawk's eye, and a lion's heart : to which may be added, activity of body, and a convenient strength, with caution and diligence, not subject to drowsiness, nor apt to be impatient. She ought to be sober and affable, not subject to passion, but bountiful and compassionate, and her temper cheerful and pleasant, that she may the better comfort her patients in their sorrow. Nor must she be very hasty, though her business may perhaps require her in another place, lest she should make more haste than good speed. But above all, she ought be qualified with the fear of God, which is the principal thing in every state and condition, and

will furnish her, on all occasions, both with knowledge and discretion. But now I proceed to more particular directions.

SECT. II. *What must be done when the Woman's Time of Labour is come.*

WHEN the time of birth draws near, and the good woman finds her travailing pains begin to come upon her, let her send for a midwife in the time; better too soon than too late, and get those things ready, which are proper, upon such occasions. When the midwife is come, let the first thing she does be to find whether the true time of the birth be come. The want of observing this, hath spoiled many a child, and endangered the life of the mother, or at least put her to twice as much pain as she needed: for unskilful midwives, not minding this, have given things to force down the child and thereby disturb the natural course of her labours; whereas nature works best in her own time and way. I do confess it is somewhat difficult to know the true time of some women's labour, they being troubled with pains so long before their true labour comes: in some, weeks before: the reason of which is, the heat of the reins, which is manifest by the swelling of the legs. And therefore, when women with child find their legs swell much, they may be assured their veins are too hot. Wherefore my advice to such women is, to cool their reins before the time of their labour, which may be effectually done by anointing the reins of the back with the oil of poppies and violet, or water lillies, and thus they may avoid that hard labour which they usually undergo, whose reins are hot, which, that they may the better prevent, let me recommend to you the decoction of plaintain leaves and roots, which is thus made: make a strong decoction of them in water, and then having strained and clarified it with the white of an egg, boil it into a syrup with its equal weight of sugar, and keep it for use. But since it is so necessary for midwives to know the true time of a woman's labour, the following section will rightly inform them,

SECT. III. *Signs by which the True Time of Women's Labour may be known.*

WHEN women draw near the time of their reckoning, especially with the first child, and perceive any extraordinary pains in their belly, they immediately send for their midwife, as taking it for their labour, though perhaps those pains which are often mistaken for labour are only caused by the cholic, and proceed from wind; which pains though they come and go, griping the whole belly, are yet without any forcing downward into the womb, as is done by those that go before labour. But these cholic pains may be removed by warm cloths laid upon the belly; and the application of a clyster or two, by which those pains that procede a true labour, are rather furthered than hindered. There are also other pains incident to women in that condition from the flux of the belly, which are easily known by the frequent stools that follow them.

But to speak more directly of the matter; the signs of labour some few days before are, that the woman's belly which before lay high, sinks down and hinders her from walking so easily as she used to do: also there flows from the womb slimy humours, which nature has appointed to moisten and make smoth the passage, that its inward orifice may be the more easily dilated when there is occasion, which beginning to open at that time, suffers that slime to flow away, which proceeds from the glands, called prestæ. These are signs preceeding labour.

But when she is presently falling into labour, the signs are great pains about the reins and loins, which coming and retreating by intervals, answer in the bottom of the belly by congruous throes: and sometimes the face is red and inflamed, the blood being much heated by the endeavours a woman makes to bring forth the child; and likewise because during the strong throes her perspiration is intercepted, which causes the blood to have recourse to her face: her privy parts are so swelled by the infant's head lying in the birth, which, by often thrusting, causes

those parts to distend outwards. She is likewise much subject to vomiting, which is also a sign of good labour, and speedy delivery, though by a great many ignorant women thought otherwise; for good pains are thereby excited and redoubled: which vomiting is occasioned by the sympathy there is between the womb and the stomach: Also, when the birth is near, most women are troubled with a trembling of the thighs and legs; not with cold, like beginning of an ague fit, but with the heat of the whole body; though this indeed does not happen always. Also, if the humours, which then flow from the womb, are discoloured with blood (which is what the midwife calls *show*), it is an infallible mark of the birth's being near; and then if the midwife puts her finger up the neck of the womb, she will find the inner orifice dilated; at the opening of which the membranes of the infant, containing the waters, present themselves, and are strongly forced downwards with each pain she hath; at which time one may perceive them sometimes to resist the finger: And then again to press forwards, being more or less hard and extended, according as the pains are stronger or weaker. These membranes with the water in them, when they are before the head of the child, which the midwives call the gathering of the womb, to the touch of the fingers resembles those eggs which yet have no shell, but are covered only by a simple membrane. After this, pains still redoubling, the membranes are broken by the strong impression of the waters, which presently flow away and then the head of the infant is presently felt naked, and presents himself at the inward orifice of the womb. When those waters come thus away, then the midwife may be assured the birth is very near; this being the most certain sign that can be; for the amnion and allantois being broken which contained those waters by the pressing forward of the birth, the child is no more able to subsist long in the womb afterwards, then a naked man in a heap of snow. Now these waters, of the child come presently after them, facilitate the labour, by making the passage slippery: and therefore let no midwife use means to force away the water: for nature

knows best when the true time of the birth is, and therefore retains the water till the time; but if by accident the water breaks away too long before the birth, then such things as will hasten it may be safely administered.

SECT. IV. *What to be done at the time of Labour.*

WHEN the midwife is satisfied that it is the true time of labour, she must take care to get all things ready that are necessary to comfort the travailing woman in that time; and the better to do it, let her see that she be not strait laced. She may also give her a pretty strong clyster, if she finds there is occasion for it; but with this proviso, that it be done at the beginning, and before the child be too forward:—for otherwise it will be difficult for her to receive it. The advantage of which clyster is, that the gut thereby will be excited to discharge itself of its excrements, and the rectum being emptied, there will be more space for the dilating of the passage; likewise to cause the pates to bear more downwards, through the endeavours she makes when other necessary things for her labour are put in order, both for the mother and the child.

As to the manner of the delivery, various midwives use different ways: some are delivered sitting on a midwife's stool; but for my own part, I think that a pallet bed girded and placed near the fire, that the good woman may come on each side, and be the more readily assisted, is much the best way.

And if the labouring woman abounds with blood it may not be improper to let her bleed a little, for by that means she will both breathe the better, and have her breath more at liberty, and likewise more strength to bear down her pain: and this may be done without danger because the child being now ready to be born, needs not the mother's blood for its nourishment any longer; and not only so, but this evacuation does many times prevent her having a fever after delivery.—Likewise if her strength will permit, let her walk up and

down her chamber ; and the better to enable her thereto, let her take some good strengthening things, such as new laid eggs, jelly, broth, some spoonfuls of burnt wine ; and encourage her to hold of her pains, bearing them down when they take her, all that she can. And let the midwife often touch the inward orifice with her finger, that she may better know whether the waters are going to break, and whether the birth will follow soon after ; for generally the birth follows in two hours after the efflux of the water.—And to help it afterwards, let, her anoint the womans, privities with emolient oil, hog-grease, and fresh butter especially if she finds them too hard to be dilated.

Let the midwife also be near the labouring woman all the while, and diligently observe her gestures, pains and complaints, for by this she may guess pretty well how her labour goes forward ; for when she changes her groans into loud cries, it is a great sign the birth is near ; at which time her pains are greater and more frequent. Let her also sometimes rest herself on her bed to renew her strength, but not too long at a time, for too lie too long at a time will retard her labour, and therefore 'tis better for her to walk about her chamber as much as she can ; which, that she may the better do, let the good woman support her under her arms, if it be necessary : for by walking, the weight of the child causes the inward orifice of the woman to dilate much sooner than it would do if she lay upon her bed ; besides her pains, by walking will be stronger and more frequent, and by consequence her labour will not be near so long. If she finds any sick qualms let her not be discouraged ; and if she finds any motions to vomit let her not suppress them, but rather give way to them : for it will (however uneasy and irksome they be for the present) be much for her benefit, because they further the pains, and provoke downwards,

SECT. V. *How to provide the Birth and cause speedy Delivery.*

WHEN the birth is long deferred after the coming down of the waters, let her hasten the birth by drinking a good draught of wine, wherein dittany, red coral, juniper berries, betony, pennyroyal, and feverfew, have been boiled, or the juice of feverfew, taken in its prime (which is in May) and clarified, and so boiled in a syrup, and twice its weight of sugar is very good upon this occasion. Also mugwort used in the same manner works the same effect. And so also does a dram of cinnamon in powder, given inwardly, or tansy bruised and applied to the privities. Likewise the stone Aetites held to the privities does in a very little time draw forth the child and the after-burden ; but great care must be taken to remove it gently, or else it will draw forth the womb and all, so great is its magnetic virtue. Also a decoction of savory made with white wine, and drank, gives a woman speedy delivery. Also wild tansy or silver weed bruised and applied to the woman's nostrils, is very good. So also are date stones beaten to powder, and half a dram of them taken in white wine : parsley is of excellent use on this occasion ; for if you bruise it, and press out the juice, and then dip a linen cloth in it, and put it up being so dipped, in the mouth of the womb, it will presently cause the child to come away, though it be dead, and will bring away the after burden also. The juice of parsley being of great virtue, especially the stone parsley being drank by a woman with child, it causeth not only the womb, but also the child in the womb, of all gross humours. A scruple of castorom in powder, in any convenient liquor, is very good to be taken in such a case, and so also are two or three drops of spirit of castorom in any convenient liquor. Eight or nine drops of the spirit of myrrh, given in a convenient liquor, have the same effect. Or, give a woman in travail another woman's milk to drink, it will cause speedy delivery. Also the juice of larks being drank with warm water

hath a mighty operation, causing speedy delivery. Take prony seeds, beat them to powder, and mix the powder with oil; with which oil anoint the loins and privities of the woman with child; it gives her deliverance very speedily, and with less pain than can be imagined. And this may be noted for general rule, that all those things that move the terms are good for making the delivery easy. There are several other things efficacious in this case; but I need not heap medicines unnecessarily, those I have already named being sufficient.

When any of the forenamed medicines have hastened the birth, let the midwife lay the woman in a posture for delivery. And first let the woman be conducted to the pallet bed placed at a convenient distance from the fire, according to the season of the year; and let there be a quilt laid upon the pallet bedstead, which is better than a feather bed, and let it have thereon a linen cloth in many folds, with such other things as are necessary, which may be changed according as the occasion requires it, that so the woman may not be incommoded with blood, waters, and other filth, which are voided in labour. Then let her lay the woman upon her back having her head a little raised by the help of a pillow, having the like help to support her reins and buttocks, that her rump may lie high; for if she lie low, she cannot very well be delivered. Then let her keep her knees and thighs as far asunder as she can, her legs being bowed towards her buttocks, and let her feet be stayed against a-log, or some other firm thing. And let two women hold her shoulders, that she may strain out the birth with the more advantage, holding in her breath, and forcing herself as much as possible in like manner, as when she goes to stool: for by such straining, the diaphragm, or midriff, being strongly thrust downwards, necessarily forces down the womb, and the child in it. In the mean time, let the midwife encourage her all she can, and take care that she have no rings on her hands when she anoints the part: then with her finger let her gently dilate the inward

orifice of the womb, and putting her fingers in the
 entry thereof, stretch them from one another when
 her pains take her, by this means endeavour to help
 forward the child, and thrusting by little and little
 the sides of the orifice towards the hinder part of the
 child's head anointing those parts with fresh butter,
 in case it be necessary. And when the head of the
 infant is somewhat advanced into the inward orifice,
 it is usual among midwives to say it is crowned, be-
 cause it both girds and surrounds it like a crown, but
 when it is gone so far, and the extremity begins to
 appear without the privy parts, then they say, the
 child is in the passage, and at this time the woman
 feels herself as if she was scratched or prickled with
 pins, and is ready to think that the midwife hurts her;
 whereas in truth it is only occasioned by the violent
 distention of those parts, which sometimes even suf-
 fer a laceration through the bigness of the child's head.
 When things are come to this posture, let the mid-
 wife seat herself conveniently to receive the child,
 which will not come very quickly; and with her fin-
 gers end which she ought also to be sure to keep part-
 ed, let her endeavour to thrust the crowning of the
 womb back over the head of the child. And as soon
 as it is advanced as far as the ears or thereabout, let her
 take hold of the two sides with her two hands, and
 wait till the good pain comes, and then quickly draw
 forth the child, taking care that the navel-string be
 not entangled about the child's neck, or any other
 part, as sometimes it is, lest thereby the after-burden
 be pulled with violence, and perhaps the womb also,
 to which it is fastened, so either cause her to bleed, or
 else break the string, both which are of bad conse-
 quence to the woman, and render her delivery the
 more difficult. Great care must be taken that the
 head be not drawn forth straight, but shake it a little
 from one side to the other, that the shoulders may the
 sooner and easier take his place immediately after it is
 past; which must be done without losing any time, lest
 the head being passed, the child stop there by the large-

ness of the shoulders, and so be in danger of being suffocated in the passage, as it has sometimes happened for want of care therein. When the head is born, she may hold it in her fingers under the armpits, and the rest of the body will follow without difficulty. As soon as the midwife hath in this manner drawn forth the child, let her lay it on one side, lest the blood and water, which follow it immediately, should do it an injury by running into its mouth and nose, as it would do if it lay on its back, and so endanger the choking of it. The child being thus drawn forth, the next thing requisite is to bring away the after-burden; but before that, let the midwife be very careful to examine whether there be any more children in the womb; for sometimes a woman may have twins; of which the midwife may satisfy herself both by the continuance of the woman's throes and the bigness of her belly. But this is not so certain as to put her hand upon the entry of the womb, and there feel whether another child is not presenting to the passage: and if so, she must have a care how she goes about the after-birth, till the woman be delivered. The first string must be cut and tied with a thread three or four double, and the ends fastened with a string to the woman's thigh, to prevent the inconvenience it may cause by hanging between the thighs.

SECT. VIII. *Of the After-burden.*

UNTIL the after-burden is brought away, which sometimes is more difficult to do than the child, and altogether as dangerous, if it be not speedily done, the woman cannot properly be said to be safely delivered, though the child be born.

Therefore, as soon as the child is born, before the midwife either ties or cuts the navel-string, if the womb should close, let her, having taken the string, wind it once or twice about one or two of the fingers of the left hand, joined together, the better to hold it, with which she may take single hold of it above the

left near the privities, drawing likewise with that very gently, resting a while, with the fore-finger of the same hand extending and stretching along the string towards the entry of the Vagina always observing for the more facility to draw it from the side to which the burden least inclines, for in so doing the rest will separate the better. And extraordinary care must be taken that it be not drawn forth, with too much violence, lest by breaking the string near the burden the midwife be obliged to put her whole hand into the womb, to deliver the woman; and she had need to take care in this matter, that so the womb itself, to which sometimes this burden is fastened very strongly, be not drawn away with it, which has sometimes happened. It is therefore necessary to assist nature with proper remedies, which are in general, whatever has been before mentioned, to cause a speedy delivery; for whatever has magnetic virtue to bring away the birth, has the same to bring away the after-birth— Besides which, the midwife ought to consider that the woman cannot but be much spent by the fatigue she has already undergone in bringing forth the infant, and therefore should be sure to take care to give her something to comfort her. To which purpose some good jelly-broths, and a little wine, with a toast in it, and other comforting things, will be necessary, Sneezing being conducive to bring away the after-birth, let her take a little white hellebore in powder to cause her to sneeze. Tansy and the stone Aetites applied as before directed, is very efficacious in this. The smoke of marygold flowers, received up a woman's privities by a funnel, will bring away the after-birth, though the midwife has lost her hold. Or, if you boil mugwort in water till it be very soft, and then take it out and apply it like a poultice to the navel of the woman in travail, constantly brings away both the birth and the afterbirth; but as soon as they are come forth, it must be instantly taken away; lest it would bring away the womb also.

SECT. VIII. *How to cut the Child's Navelstring.*

AFTER the birth and after-birth are safely brought away, the midwife ought to take care to cut the navel string : which, though it be by some esteemed a thing of small matter, yet it requires none of the least skill of a midwife to do it with that care and prudence which it ought, and therefore to instruct the industrious midwife a little herein, as soon as the child is come into the world, let her consider whether it be weak or strong ; if it be weak, let her gently put back part of the vital and natural blood in the body of the child by the naval, for that recruits a weak child, the vital and natural spirits being communicated by the mother to the child by its navel string. But if the child be strong there is no need of it. Only it will not be amiss to let the midwife know, that many children that are born seemingly dead, may be brought to life again, if she squeeze six or seven drops of blood out of that part of the naval string which is cut off, and give it to the child inwardly.

As to the cutting it short or long, authors can scarce agree about it, nor midwives neither ; some prescribe it to be cut at four fingers' breadth, which is at the best but an uncertain rule, unless all fingers were of one size. 'Tis a received opinion, that the parts adapted to generation, are either contracted or dilated according to the cutting of the naval string ; which is the reason that midwives are generally so kind to their own sex, that they leave a longer part of the navel string of a male than the female, because they would have the male well provided for the encounters of Venus. And the reason they give why they cut those more short is, because they believe it makes them modest, and their parts narrower which makes them more acceptable to their husbands. But whether this be so or not, (which yet some of the greatest teachers into the secrets of nature, affirm for a truth) yet certainly it is that great care ought to be used about

cutting of the naval string ; and especially that after it is cut, it be not suffered to touch the ground, for if it be, the child will never be able to hold its water, but be subject all its lifetime to a diabetes, as experience often confirms ; but as to this manner of cutting the navel-string, let the midwife take a brown thread, three or four times double, of an ell long, or thereabouts, tied with a single knot at each of the ends, to prevent their entangling ; and with this thread so accommodated, (which the midwife ought to have in readiness before the woman's labor, as also a good pair of scissors, that so no time may be lost) let her tie the string within an inch of the belly, with a double knot, and turning about the ends of the thread, let her tie two or more on the side of the string, reiterating it a gain, if it be necessary ; then let her cut of the navel-string another inch below the ligature, towards the after-birth, so that there only remains but two inches of the string, in the midst of which will be the knot spoken of, which must be so strait knit as not to suffer a drop of blood to squeeze out of the vessels ; but yet care must be taken not to knit it so straight as to cut it in two ; and therefore the thread must be pretty thick, and pretty strait knit, it being better too strait than too loose. Some children have miserably lost their lives, before it hath been discovered that the navel-string was not well tied. Therefore great care must be taken that no blood squeeze through for if there do, new knots must be made with the rest of the string. You need not fear to bind the navel-string very hard, because it is void of sense ; and that part of it which you leave on, falls off of its own accord in a few days, ordinarily six or seven, and some times in less time : but it is very rare that it carries longer than the eighth or ninth day.

As soon as the naval-string is cut off, apply a little cotton or lint to the place to keep it warm ; lest the cold enter into the body of the child, which it will unavoidably do, in case it be not bound hard enough ; and if the lint or cotton you apply to it, be dipped in

oil of roses, it will be the better : then having put another small rag, three or four times double upon the belly of the child, above the navel, lay the string so wrapped upon it, that it may touch the naked belly. Upon the top of all put another small bolster ; and then swathe it in a linen swathe four fingers broad, to keep it steady, lest by rolling too much, or being continually stirred from side to side, it come to fall off before the naval-string which you left remaining is fallen off. 'Tis the usual custom of the midwives to put a piece of burnt rag to it ; but I would advise them to put a small quantity of bole ammoniac, because of its drying quality. This must suffice as to cutting the naval-string and delivery of a woman in labor, where the labor is natural, and no ill accident happens. But it sometimes so falls out, that the labour is not only here difficult, but unnatural, also, in which the midwife must take other measures.



CHAP. VII.

What unnatural Labour is, and whence it proceeds ; what the midwife ought to do in such Cases.

SECT. I. *What unnatural labor is.*

IT will be necessary to acquaint my reader, that there are three sorts of bad labour, all painful and difficult, but not all properly unnatural, which are as follows :

The first, properly filed hard labour, is that where in the mother and child do suffer very much by extreme pain.

The second is difficult labour, which is thus different from the former, that beside, those extreme pains, it is generally attended with some unhappy accident, which by retarding the birth, makes it very difficult ; Neither of those, though hard and difficult, can be

called unnatural; for women to bring forth children in pain and sorrow, is natural.

It is therefore the third sort of labor, which I called unnatural; and that is, when the children essays to come into the world in a contrary position to that which nature ordained. To explain this, the reader must know, that there is but one right and natural posture in which children come to the birth, and that is when the head comes first, and the body follows after in a straight line. If, instead of this, the child comes its feet foremost, or with the side across, it is contrary to nature, or, to speak more plainly, unnatural.

SECT. II. *Whence hard, difficult, and unnatural Labour proceeds.*

THE true physical reason why women in general bring forth their children with so much pain, is that the sense of feeling being distributed to the whole body by the nerves, and the mouth of the womb being so strict, that it must of necessity be dilated at the time of her delivery; the dilating thereof stretches the nerves, and from thence cometh the pain: some women having more pain in their labour than others, proceeds from their having the mouth of the matrix more full of nerves than others.

Hard and difficult labour may proceed either from the mother or child, or from both: It may proceed from the mother, by reason of a general indisposition of her body, as from the indisposition of some particular part, and that principally of the womb, which may be affected with such a weakness as renders the mother unable to expel her burden. It may be also because she is too young or she may be too old, and so may have the passage too strait, and then, if it be her first child, the parts may be too dry and hard, and cannot easily be dilated. The child also does a so cause labour to be hard and difficult, because it hinders the true pain, which should accelerate it: for which reason, all great and acute pains render a woman's labour very difficult. As when the woman is taken with a violent fever, frequent convulsion; or

great flooding, or any other violent distemper, especially when the membranes are thick, and the orifice is too strait or the neck of the womb not sufficiently opened.

Hard labour may also proceed from the child, and this is, either when it happens to stick to a mole, or is so weak that it cannot break the membrane; also, when it is too big, either all over, or its head only; or, if the navel vessels would be twisted about its neck, as when it proves monstrous, or comes into the birth in an unnatural posture. Sometimes it proceeds from the ignorance of the midwife, who may hinder nature in her work.

SEC. III. How the Midwife must proceed in order to the delivery of a Woman, in case of hard labour, and great extremity.

IN case the midwife finds a woman in difficult labour, she must endeavour to know the particular obstruction or cause thereof, that so she may apply a suitable remedy. When hard labour is caused by a woman's being too young and too strait, the passages must be anointed with oil, hog's lard, or tallow butter, to relax and dilate them the easier. But if a woman be in years, and has hard labour from her first child, let her lower-parts be anointed to mollify the inward orifice, which in such case, (being more hard and callous) does not easily yield to the distention of labour; and indeed this is the true cause why such women are longer in labour, and why their children in their birth are more subject to bruises than others. Those who are very lean, and have hard labour from that cause, let them nourish their parts with oil and ointments, to make them more smooth and slippery, that the head of the infant in the womb may not be compressed and bruised by the hardness of the mother's bones in its passage. But if the cause be weakness, she ought to be strengthened, the better to enable her to support her pain. Since difficult labour proceeds from divers causes, the midwife must make use of several remedies to women in hard, difficult labour;

which must be adapted to the causes from whence it proceeds.

I need not tell the judicious midwife, that in cases of extremity, when the labour is not only hard, but difficult and dangerous, a far greater care must be had than at other times. In such cases the situation of the womb must be minded, and accordingly her posture of lying will be regulated; which will be best across the bed, being held by those that are of a good strength, to prevent her slipping down, or moving herself during the time of operation. Then let her thighs be put asunder, as far as may be, and held so, while her legs are bent backwards towards her hips, her head leaning upon a bolster, and the reins of her back supported in like manner, her rump and buttocks being lifted up; observing to cover her stom, ach, belly, and thighs, with warm linnen, as well for decency's sake as to keep them from the cold.

The woman being in this posture, let the midwife, or other operator, put up her hand and try if the neck of the womb be dilated, and then remove the contracted blood that obstructs the passage of the birth, and having gently made way, let the operator tenderly move the infant, having the hand anointed with sweet butter, or an harmless pomace, and if the waters are not come down they may be let forth without any difficulty. And if the infant should attempt to break forth not with the head foremost, or across, he ought gently to turn it, that he may find the feet; which having done, let him draw forth one, and having fastened a ribbon, put it up again, and finding the other, bring them as close as may be: let the woman breathe between whiles, assisting nature what she can by straining in bringing forward the birth, that so he may more easily draw it forth; and that the operator may do it the better, and his hold may be the surer, he must fasten or wrap a linnen cloth about the child's thighs, observing to bring it into the world with the feet downwards.

But in case there be a flux of blood, let the operator be well satisfied whether the child or the secun-

dine comes first; for sometimes when the secundine has come first, the mouth of the womb has been thereby stopped, and the birth hindered, to the hazard both of the woman and the child and therefore, in this case the secundine must be removed by a swift turn, and the child sought for, and drawn forth, as has been directed.

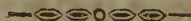
If upon enquiry it appears that the secundine comes first, let the woman be delivered with all convenient speed, because a great flux of blood will follow; for then the veins are opened. And on this account two things are to be minded; first, whether the secundine advances forward much or little: if the former, and the head of the child first appears, it must be directed to the neck of the womb, as in the case of natural birth; but if there appears any difficulty in the delivery, the best way is to search for the feet, and by them it may be put by with a gentle hand, and the child taken out first: but if the secundine is advanced, so that it cannot be put back, and the child follow it close, then the secundine is to be taken out first with much care, and as swift as may be, and laid aside, without cutting the entrail that is fastened to them; for by that you may be guided to the infant, which, whether it be alive or dead, must be drawn forth by the feet as soon as possible: though this is not to be done but in case of great necessity, for the order of nature is for the secundine to come last.

SECT. IV. *Of the Delivery of a Dead Child.*

IN delivering women of a dead child, the operator ought to be certain that the child is dead, which may be known by the falling of the mother's breasts, the coldness of her belly, the thickness of her urine, which is attended with a stinking sediment at the bottom; and no motion to be perceived in the child. As to when she turns herself in her bed, the child frays like a lamp of lead, and her breath stinks, though not used to do so. When the operator is certain that the child is dead, let him or her apply them-

Selves to the saving of the mother, by giving her those things that are most powerful in serving nature in her operations. But if through weakness, the womb is not able to cooperate with nature, so that a mutual operation is absolutely necessary, let the operator carefully observe the following directions, viz. If the child be found dead, with its head foremost, he must take notice that the delivery will be the more difficult, because in this case it is not only impossible that the child should any ways assist in its delivery, but the strength of the mother does also very much fail her; and thereupon the more sure and safest way for her is to put up the left hand, sliding it as hallow in the palm as the can, into the neck of the womb, into the lower part thereof toward the feet, and then between the infant and the neck of the matrix; and having a hook in the right hand, couch it close, and slip it above the left hand between the head of the child and the flat of the hand, fixing it into the bone of the temple towards the eye; or for want of convenient coming at that, observe to keep the left hand in its place, gently moving and stirring the head with it, and so with the right hand hook draw the child forward, encouraging the woman to put forth her utmost strength, and always drawing when the woman's pains are upon her. The head being thus drawn forth, the operator must with all speed slip his hand under the arm holes of the child, and take it quite forth, giving immediately to the woman, a toast of fine wheaten bread in a quarter of a pint of tent, to revive and cherish her spirits. By what I have already shewn, the midwife will know what to do in any other case that may fall out remembering, that for a child to come head foremost, and the body to follow in a straight line is the right posture for the child when it comes to the birth; and if it comes any other way, it will be the wisdom of the midwife, if possible, to bring it to this posture; but if it cannot be done without very great danger, then put it in a posture that it may be brought forth by the feet. And if the midwife, perceiving in what posture the child presents, or that the woman stoob

or any other accident happens, by which she finds it is not in her power to deliver it, it will be best for her to send for a man midwife in time, rather than put things to the utmost extremity.



C H A P. VIII.

SECT. I. *Directions for Child-bed Women after Delivery*

AFTER the birth and after birth are brought away, if the woman's body be very weak, keep her not too hot, the extremity of heat weakens nature, and dissolves the strength; but whether she be weak or strong, let no cold air come near her, for cold is an enemy to the spermatie parts; and if cold gets into the womb, it increases the after-pains, causes swellings in the womb and hurts the nerves. Therefore if a woman has had very hard labour, 'tis proper, after delivery, to wrap her in the skin of a sheep, taken as warm as possible, and putting the fleshy side to her reins and belly: if a sheep's skin cannot be well had, the skin of a hare or rabbit, taken off as soon as it is killed may be applied to the same parts and by so doing the dilation made in the birth will be closed up, and the melancholy blood expelled from those parts; and these may be continued during the space of an hour or two. After which, let the woman be swathed with a fine linen cloth, about a quarter of a yard in length, chaffing her belly, before it be swathed, with the oil of St. John's wort; afterwards raise up the matrix with a linen cloth, many times folded, then with a little pillow or quilt cover her flank, place the swathe somewhat above the haunches, winding it indifferently stiff, applying at the same time, a warm cloth to the nipples. Care should be taken not to apply any remedy to keep back the milk, because those remedies which drive back the milk, being of a dissolving nature, it is im-

proper to apply them to the breast during such a disorder, lest evil humours should be contracted in the breast thereby; and therefore twelve hours at least ought to be allowed for the circulation and settlement of the blood.

After the woman has been delivered some time, you may make a restrictive of the yolk of two eggs, a quarter of a pint of white wine, oil of St. John's wort, oil of roses, plantains, and rose water, of each an ounce, mix them together, fold a linnen cloth, and dip therein, warm it before a gentle fire apply it to the breasts, and the pain of those parts will be greatly eased.

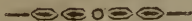
But be sure not to let her sleep soon after her delivery, but let her take some broth or candle, or any other liquid matter that is nourishing; about four hours after her delivery, and then she may be safely permitted to sleep, if she is disposed, as it is probable she will be, being tired with the fatigue of her labour. But before this as soon as she is laid in her bed, let her drink a draught of burnt white wine, in which melt a dram of spermaceti. Let her also avoid the light for the first three days; for labour weakens the eye sight. The herb vervain is of singular service to the sight, and may be used any way, either boiled in meats or drink, not having the least offensive taste, but many pleasant virtues. If she should be feverish, and the leaves or roots of plantain to it; but if her courses come not away as they ought, let the plantain alone, and instead thereof put mother of thyme. If the womb is foul, which may be known by the impurity of the blood, and its stinking, and coming away in clotted lumps: or, if you suspect any of the after-birth to be left behind, which may sometimes happen, though the midwife be ever so careful and skillful, then make her a drink of feverfew, penny-royal mother of thyme, boiled in white wine, and sweetened with sugar; panada and new laid eggs are the best meat for her at first; of which let her eat often, and but a little at a time. Let her use cinnamon in

all her meets and drinks, for it mightily strengthens the womb; let her stir very little for six or seven days after her delivery; and talk little, for that weakens her. If she goes not well to stool, give a clyster made with the decoction of mallows, and a little brown sugar. After she has lain in a week, or more, give her such things as close the womb; to which you may add a little polipodium, both leaves and roots bruised, which will purge gently: This is as much in case of natural birth as needs at first be done.

SECT. II. *In extremity of unnatural Labour.*

Let the woman be sure to keep a temperate diet; and take care that she does by no means overcharge herself, after such an excessive evacuation, not being ruled by or giving credit to unskillful nurses, who are apt to admonish them to feed heartily, the better to repair the loss of blood: for the blood is not for the most part pure, but such as has been detained in the vessels or membranes, and it is better voided for the health of a woman than kept, unless there happens an extraordinary flux of blood; for if her nourishment be too much, it may make her liable to a fever, and increase the milk to a superfluity, which may be of dangerous consequence. It is therefore requisite for the first five days especially, that she take moderately panada, broth, poach'd eggs, jelly of chickens, and of calf feet, and French barley broth, each somewhat increasing the quantity. And if she intend to be nurse to her child, she may take a little more than ordinary to increase the milk by degrees; which must be of no continuance but drawn off, either by the child or otherwise. In that case likewise let her have coriander or fennel-seed boiled in barley-broth: and by that means, for the time before mentioned, let her abstain from meat. If no fever trouble her, she may drink now and then a small quantity of white wine or claret, as also syrup of maiden hair, or any other syrup of an astringent quality taking it in a little water well boiled. And after the fear of a fe-

ver or contraction of humour to the breast is over, she may then be nourished more plentifully with the broth of pullets, capons, pigeons, partridges, mutton, veal, &c, which must not be till after eight days at least, from the time of the delivery; for by that time the womb will have purged itself, unless some intervening accident should hinder. It will then be expedient to give her cold meats, so it be done sparingly, the better to gather strength and let her during the time, rest quietly, and free from any disturbance, not sleeping in the day-time if she can avoid it. If there happens any obstructions in the evacuation of excrements, the following clyster may be administered: Take pellitory of the wall, and of both the mallows of each a handful; fennel and anniseed of each two ounces; boil them in the decoction of a sheep's head, and take of this three quarters, dissolving it in the common honey and coarse sugar, and of new fresh butter, two ounces; strain it well, and administer it clyster-wise. But if this does not operate to your mind, then you may take an ounce of catholican.



C H A P. IX.

Of the Mole, or false Conception; or of Monsters, and monstrous Births, with the Reason thereof.

SECT. I. *Of a Mole, or false Conception.*

A MOLE or false conception, is nothing else but a mass or great lump of flesh burthening the womb. It is an inarticulate piece of flesh without any form, and therefore differs from monsters, which are both formata and articulate; and then it is said to be a conception, but a false one, which puts a dis-

ference between a true conception and a mole; and the difference holds good three different ways: First in the genus, because a mole cannot be said to be an animal. Secondly, it differs in species because it hath no human figure, and bears not the character of a man. Thirdly, it differs in the individuum, for it hath no affinity with the parts of that in the whole body, or any particles of the same.

There are a variety of judgments among authors about the producing cause of this effect, some affirming that it is produced by the woman's seed going into the womb without the man's: but because we have before proved that women have properly no seed at all, but only an Ovalium, which is fecundated by the active principle of the man's seed, this opinion needs no confutation. Others say it is engendered of the monstrous blood; but should this be granted, it would follow that maids, by having their courses stopped, might be subject to the same, which never any yet were. The true cause of this carnous conception, which we call a mole, proceeds both from the man and woman; from corrupt and barren seed in the man, and from the monstrous blood in the woman, both mixed together in the cavity of the womb; and nature finding herself weak, (yet desirous of maintaining the perpetuity of her specie,) labours to bring forth a vicious conception rather than none; and not being able to bring forth a living creature, generates a piece of flesh.

This imperfect conception may be known to be such by the following signs. The monthly courses are suppressed, the belly is puffed up, and waxed hard, the breath smells, and the appetite is depraved. But you will say these are signs of a breeding woman in true conception, and therefore these cannot distinguish a mole. To this I answer, though thus they agree, yet they are different in several respects; for a mole may be felt in the womb before the third month, which an infant cannot: the motion of the mole being only caused by the faculty of the womb, and of the seminal spirit diffused through its substance; for

though it has no animal, yet it has a vegetative life ; and then the belly is suddenly swelled where there is a mole ; but in true conception the belly is first contracted, and then riseth gradually. Another difference is, the belly being pressed with the hand, the mole gives way, and the hand being taken away, it returns to the place again ; but the child in the womb, though pressed with the hand, moves not presently, and being removed returns not at all, or at least very slowly. But, to name no more, another very material difference is, that a child continues not in the womb above eleven months at most, but a mole sometimes continues four or five years, sometimes more or less, according to its being fastened to the matrix ; for sometimes the mole hath fallen away in four or five months ; and if it remains until the eleventh month, the legs are feeble, and the whole body appears in a wasting condition, or the belly swells bigger and bigger, which is the reason that some who are thus afflicted, think they are hydropical, though it be no such thing ; which a woman may easily know, if she will but consider, that in a dropsy the legs will swell and grow big ; in case of a mole they consume and wither. This distemper is an enemy to true conception, and of dangerous consequence ; for a woman that breeds a mole is every way more inconvenienced than a woman that is with child ; and all the while she keeps it, she lives in danger of her life.

The cure of this distemper consists chiefly in expelling it as soon as may be ; for the longer it is kept, the worse it is : and this many times cannot be effected without manual operation ; but that being the last remedy all other means ought first to be used. Amongst which, Phlebotomy ought not to be omitted ; for seeing letting of blood causeth abortion, by reason it takes away that nourishment that should sustain the life of the child, why may not this vicious conception by the same means be deprived of that vegetative sap, by which it lives ? to which end open the liver-vein, and the saphena in both feet fasten ; the cupping-glasses to the loins and sides of the belly ;

which done, let the urinary part be first molified, and the expulsive faculty be provoked to expel the burden. And to loosen the ligatures of the mole, take mallows with roots, three handfuls; pellitory, camomile, violet leaves, melilot, roots of fennel, parsley, mercury of each two handfuls; fenugreek and lintseed, of each one pound; boil them in water, and make a bath thereof, and let her sit therein up to her navel. At her going out of the bath, let her reins and privities be anointed with this unguent: Take ammoniati, landanif fresh butter, of each one ounce; and with oil of lintseed make an ointment; or, instead of this, may be used unguentum agrippæ or dielthæ. Also, take aq. byronæ composito roots of althæ and mercury of each a handful; lintseed and barley-meal, of each six ounces, boil all these with water and honey and make a plaister, and the ligaments of the mole being thus loosened, let the expulsive faculty be stirred up to expell the mole; for the effecting of which, all those medicaments are very proper which bring down the courses. Therefore take savine, madder, valerian horehound, sage, hyssop, betony, pennyroyal, calamint, hypericon, and with water make a decoction, and give three ounces of it, with an ounce and a half of syrup of feverfew. But if these remedies prove not available, then must the mole be drawn away by manual operation, in the manner following: Let the operator, (having placed the woman in a proper posture, as has been directed in cases of unnatural labour) slide his hand into the womb, and with it draw forth the mole; but if it be grown so big, that it cannot be drawn away whole, (which is very rare, because it is a soft tender body, and much more pliable than a child) let the operator bring it away by parts, by using a crotchets or knife, if it cannot be done otherwise. And if the operator finds it is joined and fastened to the womb, he must gently separate it with his finger's ends, his nails being parted putting them by little and little between the mole and the womb, beginning on the side where, it does stick fast, and so pursue it till it be quite loos-

ent, taking great care if it grows too fast not to rend or hurt the proper substance of the womb, proceeding as in the case of an after-burden, that stays behind in the womb, when the string is broken off: but a mole has never any string fastened to it, or any burden whence it should receive any nourishment, but does of itself immediately draw it from the vessels of the womb. And thus much shall suffice to be said concerning a mole; of which I have shewn the cause, the signs, and the cure.

SECT. II. *Of Monsters, and Monstrous births.*

MONSTERS are properly depraved conceptions and are deemed by the ancients to be excursions of nature, and are always vicious, either by figure, situation, magnitude, or number.

They are vicious in figure, when a man bears the character of a beast; vicious in magnitude, when the parts are not equal, or one part is bigger than another; and this is a thing very common, by reason of some excrecence. They are vicious in situation many ways; as if the ears were on the face, or the eyes on the breasts, or on the legs, as were seen in a monster born at Ravenna in Italy, in the year 1570: And lastly, vicious in number, when a man hath two heads, four hands, and two bodies joined, which was the case of the monster born at Zarára in the year 1550.

As to the cause of their generation, it is either divine or natural. The divine cause proceeds from the permissive will of the great Author of our being, suffering parents to bring forth such deformed monsters, as a punishment for their filthy and corrupt affection, let loose unto wickedness, like brute beasts that have no understanding: for which reason the ancient Romans enacted, that those who were deformed should not be put into religious houses. And St. Jerome, in his time, grieved to see the deformed and lame offered up to God in religious houses; and Kecherman, by way of inference, excluded all that were misshapen, because outward deformity of body is often a sign of

the pollution of the heart, as a curse laid upon the child for the incontinency of the parents : yet there are many born depraved, which ought not to be ascribed to the infirmity of the parents. Let us therefore search out the natural cause of their generation, which, according to those who have dived into the secrets of nature is either in the matter of the agent, in the seed, or in the womb. The matter may be in fault two ways, by defect or excess. By defect, when the child hath but one arm or leg, &c. By excess when it has three hands or two heads. Some monsters are also begotten by women's bestial and unnatural coition, &c. The agent or womb may be in fault three ways, first, in the forming faculty, which may be too strong or weak, which sometimes produces a depraved figure. 2dly, The evil disposition of the instrument or place of conception, will cause a monstrous birth. And, 3dly, The imaginative power at the time of conception, is of such a force as to stamp a character of the thing imagined upon the child ; thus a woman at the time of conception, beholding the picture of a Blackamoor, conceived and brought forth a child resembling an Ethiopian ; and by this the children of an adulteress, though begotten by another man, may have the nearest resemblance to her own husband. This power of imagination was well enough known to the ancients, as is evident by the example of Jacob, the father of the twelve tribes of Israel, who having agreed with his father in law, to have all the spotted sheep for the keeping of his flock to increase his wages, took hazel rods, peeling them with white streaks in them, and laid them before the sheep when they came to drink, and they coupling together whilst they beheld the rods, conceived and brought forth spotted young. Nor does the imagination work in the child at the time of conception only but afterwards also ; as was seen in the example of a worthy gentlewoman, who being big with child, and passing by a butcher killing meat, a drop of blood spirted on her face ; whereupon she presently said that the child would have some belmish on his face, which

proved true, for at the birth it was found marked with a red-spot.

But besides the way already mentioned, Monsters are sometimes produced by other means, viz. by the undue coition of a man and his wife, when her monthly flowings are upon her; which being a thing against nature, no wonder that it should produce an unnatural issue. If therefore a man's desire be ever so great for coition, (as sometimes it is after long absence), yet if a woman knows not that the custom of women is upon her she ought not admit of any embraces, which at that time are both unclean and unnatural. The issue of these unclean embraces proving often monstrous, as a just punishment for such a turpeditious action. Or, if they should not always produce monstrous births, yet are the children thus begotten, for the most part, dull, heavy, sluggish, and defective in understanding, wanting the vivacity and liveliness, which those children are endued with who are begotten when women are free from their courses.

There has been some contending among authors, whether those who are born monsters have reasonable souls, the result of both sides at last coming to this, that those who, according to the order of nature, are descended from our first parents by the coition of a man and woman, though their outward shape be deformed and monstrous, have notwithstanding reasonable souls; but these monsters, that are not begotten by man, but are the product of a woman's unnatural lust, copulating with other creatures, shall perish as the brute beasts by whom they were begotten, not having reasonable souls. The same being also true of imperfect and abortive births.

Some are of opinion, that monsters may be engendered by infernal spirits; but notwithstanding Aegidius Facius pretended to believe it with respect to a deformed monster, born at Cracovia: and Hieronimus Carcomus writeth of a maid that was got with child by the devil; yet, as a wicked spirit is not capable of having human seed, how is it possible he should beget a human creature? If they say, that the devil may as-

sume to himself a dead body, and enliven the faculties of it, and thereby make it able to generate, I answer, that though we suppose this could be done, which I believe not, yet that body must bear the image of the devil ; and it borders upon blasphemy, to think that the all-wise and good Being would so far give way to the worst of spirits as to suffer him to raise up his diabolical offspring : for, in the school of nature, we are taught the contrary, viz. that like begets like ; whence it follows that a man cannot be born of a devil.

The first I shall present is a most frightful monster indeed, representing an hairy child. It was covered over with hair like a beast. That which rendered it yet more frightful was, that its naval was in the place where his nose should stand, and his eyes placed where his mouth should have been, and its mouth was in the chin. It was of the male kind, and born in France in the year 1597.



A boy was born in Germany, with one head and one body, but having four ears, four arms four thighs, four legs, and four feet.



This birth, the learned who beheld it, judged it to proceed from the redundance of the seed ; but there not being enough for Twins, nature formed what she could, and so made the most of it.

This child lived some years, and though he had four feet, he knew not how to go ; by which we may see the wisdom of nature, or rather the God of nature, in the formation of the body of man.

Heav'n in our first formation, did provide
Two arms and legs ; but what we have beside
Renders us monstrous and unshapen too,
Nor have we any work for them to do.
Two arms, two legs, are all that we can use,
And to have more, there's no wise man will chase.

In the time of Henry III. a woman was delivered of a child, having two heads and four arms, and the rest was a twin under the naval; and then beneath all the rest was single, as appears in the figure. The heads were so placed that they looked contrary ways,



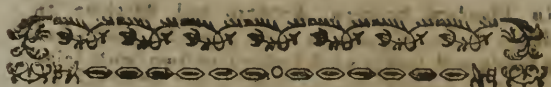
and each had too distinct arms and hands. They would both laugh, speak, cry, and both eat and be hungry together. Sometimes the one would speak, and the other would keep silence, and sometimes both would speak together. It was of the female sex;—and though it had two months, and did eat with both, yet there was but one fundament to disburden nature. It lived several years, but the one outlived the other three years, carrying the dead one, (for there was no parting them,) till the other fainted with the burden, and more with the stink of the dead carcase.

In Flanders, between Antwerp and Mecklin, in a village called Uthaton, a child was born which had two heads and four arms, seeming like two girls joined together, having two of their arms lifted up between, and above their heads, their thighs being placed as it were across one another, according to the figure. How long they lived, I had no certain account.



Nature does sometimes to us monsters show,
That we by them may our own mercies know :
And thereby sin's deformity may see,
Than which there's nothing can more monstrous be,

'The end of the Second Part,



PART III.

Displaying the Secrets of Nature relating to Physiognomy.

CHAP. I.

SECT. I. *Of Physiognomy, shewing what it is, and from
whence it is derived.*

PHYSIOGNOMY is an ingenious science, or knowledge of nature, by which the inclinations and dispositions of every creature are understood ; and because some of the members are uncompounded and entire of themselves, as the tongue, the heart, &c. and some of a mixed nature, as the eyes, the nose, and others, we therefore say that there are many signs which agree and live together, which inform a wise man how to make his judgment, before he delivers it to the world. Nor is it to be esteemed a foolish or idle art, seeing it is derived from the superior bodies ; for there is no part of the face of a man, but what is under the peculiar influence or government, not only of the seven planets, but also of the twelve signs of the zodiac ; and the disposition, vices, virtues, and fatality, either of a man or woman, are planely foretold, if the person pretending to the knowledge thereof be an artist, which, that my reader may attain to, I will set these things in a clear light.

The reader should remember that the forehead is governed by Mars : the right eye is under the dominion of Sol ; the left is ruled by Luna or the Moon ; — the right ear is the care of Jupiter ; the left of Saturn : the nose is claimed by Venus : which by the way is one reason that, in all unlawful veneral

encounters, the nose is too subject to bear the scars which are gotten in those wars; and the nimble Mercury, the significator of eloquence, claims the dominion of the mouth, and that very justly.

Thus have the seven planets divided the face among them, but not so absolutely, but that the twelve signs of the zodiac do also come in for a part: And therefore the signs Cancer presides in the uppermost part of the forehead: Leo attends upon the right eye brow as Sagittarius does upon the right eye, and Libra upon the right ear; upon the left eye and eye brow Aquarius and Gemini, and Aries the left ear; Taurus rules the middle of the forehead, and Capricorn the chin; Scorpio takes upon him the protection of the nose: Virgo claims the precedence of the right cheek, and Pisces of the left. And thus the face of man is cantoned out among the signs and Planets; which being carefully attended to, will sufficiently inform the artist how to pass a judgment. For according to the sign or planet ruling, so also is the judgment to be of the part ruled, which all those that have understanding know easily how to apply.

When we behold a man whose face is like unto a woman, and we pass a judgment upon it, having diligently observed it, and not on the face only, but on other parts of the body and his hand, &c. in like manner we also behold the face of a woman, who, in respect of her flesh and blood is like unto a man, and in the disposure also of the greatest part of her body. But doth Physiognomy give the same judgment of her, as it does of a man that is like her? By no means, but far otherways, in regard that the conception of the woman is much different from that of a man, even in those respects which are said to be common.

According to the rule of Physiognomy, of all and every part of the members of the body, we will begin with the head.

C H A P. II.

Of the Judgment of Physiognomy drawn from the Head and Face.

SECT. I. *Of the Hair of the Head, either of a Man or Woman.*

HAIR that hangs down without curling, if it be of a fair complexion, and thin, and soft withal, signifies a man to be naturally faint hearted, and of a weak body, but of a quiet and harmless disposition. Hair that is big and thick, and short withal denotes a man to be of a strong constitution, secure, bold, deceitful, and for the most part unquiet and vain, lusting after beauty and more foolish than wise. He whose hair grows thick on his temples and his brow, is simple, vain, luxurious, and lustful. He whose hair is red, is proud, deceitful, detracting, vengeous and full of envy. He whose hair is extraordinary fair, is, for the most part, a man fit for all praise-worthy enterprizes, a lover of honours, and inclined to do good.

§. 2. *Of judgment of Physiognomy drawn from the Forehead.*

The forehead that riseth in a round, signifies a man liberally merry, of a good understanding, generally inclined to virtue. He who has a full, large forehead, and a little round withal, destitute of hair or at least that has little on it, is bold, malicious, high spirited and full of choler, and apt to transgress beyond all bounds, and yet of a good wit and very apprehensive. He whose forehead is long and high and jutting forth, and whose face is figured almost sharp, and picked downwards towards the chin, is also reasonably honest, but weak and simple, and of a hard fortune.

§. 3. *Of what Judgment may be given by Physiognomy from the Eye brows of Man or Woman.*

Those Eye brows that are much arched whether in man or woman, and which by a frequent motion elevate themselves, shew the person to be proud, high spirited, vain glorious, bold and threatening; a lover of beauty, and indifferently inclined either to good or evil. He whose eye-lids bend downwards when he speaks to another man, or when he looks upon him, and who has a kind of skulking look, is by nature a penurious wretch, close in all his actions, of very few words, but full of malice in his heart.

§. 4. *Judgment to be made from the eyes of either Man or Woman.*

He whose eyes are small and conveniently round, is bashful and weak, very credulous, liberal to others, and civil in his conversation. He whose eyes look a squint, is thereby denoted to be a deceitful person, unjust, envious, furious, a great liar, and as the effect of all this, miserable. But those whose eyes are neither too little nor too big, and incline to a black, do signify a man mild, peaceable, honest, witty and of a good understanding, and one that, when need requires it, will be servicable to his friend.

§. 5. *Judgment drawn from the Nose.*

A long thin nose denotes a man bold, curious, angry, vain, easy to be persuaded, either to good or evil weak and credulous. A long nose and extended, the tip of its bending downward, shews the person to be wise, discreet, secret, and officious, honest and faithful, and one that will not be overreached in bargaining. He who hath a long and great nose, is an admirer of the fair sex, and well accomplished for the wars of Venus. A nose very sharp, denotes a person to be of a fretful disposition, always pining and peevish. A nose that turns up again, and is long and full on the top of it shews the person that has it to

be bold and proud, covetous, envious, luxurious, a liar and deceiver, vain glorious, unfortunate, and contentious.

He whose nose riseth high in the middle, is prudent and politick and of great courage, honourable in his actions, and true to his word.

§. 6. *Of Judgment to be made from the Mouth.*

A great and wide mouth shews a man to be bold warlike shameless and stout, a great liar and as great a talker and carrier of news, and also a great eater; but for his intellectuals, he is very dull, being for art very simple. A little mouth shews the person to be of a quick pacific temper, somewhat fearful, but faithful, secret, modest, and but a little eater.

§. 7. *Judgment drawn from the Lips of a Man or a Woman.*

The lips when they are very big and blabbering, shew a person to be credulous, fooling, dull, and stupid, and apt to be inticed to any thing. Lips of a different size denote a person to be discreet, secret, in all things, judicious, and of a good wit, but somewhat hasty.

§. 8. *Judgment drawn from the Teeth.*

When the teeth are small and but weak in performing their office, and especially if they are short and few, though they shew the party to be of weak constitution, yet they denote him to be of an extraordinary understanding, and not only so, but also of a meek disposition, honest, faithful, and secret in whatsoever he is trusted with. To have some teeth longer and shorter than others, denotes a person of a good apprehension, but bold disdainful, envious and proud.

§. 10. *Judgment drawn from the tongue.*

A tongue too swift in speech shews a man to be downright foolish, or at best but a vain wit. A flaming tongue, or one that stumbles in the mouth sig-

gives a man of weak understanding, and of a wavering mind, quickly in a rage and soon pacified.

§. 11. *Judgment to be drawn from the voice of Men and Women.*

A great and full voice, in either sex, shews them to be of a great spirit confident, proud and wilful. A faint and weak voice, attended with but little breath shews a person to be of a good understanding, a nimble fancy, a little eater, but weak of body, and of a timorous disposition. A loud and shrill voice, which sounds clearly, denotes a person provident, sagacious, true and ingenious, but withal capricious, vain-glorious, and too credulous. A strong voice when a man sings, denotes him to be of a strong constitution and a good understanding, neither too penurious, nor too prodigal; also ingenious, and an admirer of the fair sex. A weak and trembling voice shews the owner of it to be invidious, suspicious, slow in business, feeble and fearful. And a loud shrill and unpleasant voice, signifies one bold and valiant.

§. 12. *Judgment drawn from the chin.*

A thick and full chin abounding with too much flesh, shews a man inclined to peace, honest and true to his trust; but slow in invention, and easy to be drawn to good or evil.

§. 13. *Judgments known from the Ears.*

Great and thick ears are a certain sign of a foolish person, of a bad memory, and worse understanding. But small and thin ears shew a person to be of a good wit and understanding, grave, secret, thrifty, modest, resolute, of a good memory, and one willing to serve his friend.

§. 14. *Judgments drawn from the Face of either Man or Woman.*

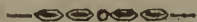
A face apt to sweat on every motion, shews the person to be of a hot constitution, vain and luxurious,

or good stomach, but of a bad understanding, and a worse conversation. A very fleshy face shews the person to be of a fearful disposition, but a merry heart and withal bountiful and discreet, easy to be intreated and apt to believe every thing. A lean face by the rules of physiognomy denote the person to be of a good understanding, but somewhat capricious and disdainful in his conversation. A plump face and full of carbuncles, shews a man to be a great drinker of wine, vain, daring, and soon intoxicated. A face red or high coloured shews a man much inclined to choler, and one that soon will be angry; and not easily pacified. A long and lean face, shews a man both to be bold in speech and action, and withal foolish, quarrelsome, proud, injurious, and deceitful.

§. 5. Of Judgments drawn from the Head in general, either of Men or Women.

A great head, and round withal, denotes the person to be secret and of a great application in carrying on of business, and also ingenious, and of a large imaginative faculty and invention: and likewise laborious, constant and honest. The head whose gullet stands forth, and inclines towards the earth, signifies a person thrifty, wise, peacable, secret, of a retired temper, and constant in the management of his affairs. A big head and a broad face, shews a man to be very courageous, a great hunter after women, very suspicious bold and shameless.

C H A P. III.



Of the Judgments drawn from several other Parts of Man's Body.

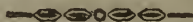
IN the body of man, the head and face are principal parts, being the index that heaven has laid open to every one's view, to make a judgment therefrom; and therefore I have been the larger in my judgments, from the several parts thereof. But as to other parts, I shall be much more brief, as not being so obvious to the eyes of men; yet I shall proceed in order.

The throat, if it be white, whether it be fat or lean, shews a man to be vain-glorious, timorous, wanton, and very subject to choler. If the throat be so thin and lean that the veins appear, it shews a man to be weak, slow, and of a dull and heavy constitution.

A long neck, shews one to have long and slender feet, and that the person is stiff and inflexible either to good or evil. A short neck shews one to be witty and ingenious, but deceitful and inconstant, well skilled in the use of arms; and yet cares not to use them, but a great lover and admirer of peace and quietness.

A lean shoulder bone, signifies a man to be weak, timorous, peaceful, not laborious, and yet fit for any employment. He whose shoulder-bones are of a great bigness, is commonly by the rules of physiognomy, a strong man, faithful but unfortunate, somewhat dull of understanding, very laborious, a great eater and drinker, and one equally contented in all connections. He whose shoulder bone seems to be smooth, is by the rule of nature modest in his looks, and temperate in all his actions, both at bed and board. He whose shoulder bone bends and is crooked inwardly, is commonly a dull person, and withal deceitful.

Long arms hanging down, and touching the knees, tho' such arms are rarely seen, denotes a man of liberal but withal vainglorious, proud and confident. He whose arms are very short, in respect of the stature of his body, is thereby signified to be a man of a high and gallant spirit, of a graceful temper, bold and warlike. He whose arms are heavy and full of bones, sinews and flesh, is a man of reasonable strength, a great desirer of novelties, and beaurious, and one that is very credulous, and very apt to believe every thing. He whose arms are very hairy, whether they be lean or fat, is, for the most part, a luxurious person, weak in body and mind, very suspicious, and malicious withal. He whose arms have no hair on them, is of a weak judgment very angry, vain, wanton, credulous, easily deceived himself, and yet a great deceiver of others, no fighter, and very apt to betray his dearest friends.



C H A P. IV.

Of Palmistry, shewing the various Judgments drawn from the Hand.

I WILL in the first place present the figure of a hand, and extend the various facts therein.



By this figure the reader will see that one of the lines, and which indeed is reckoned the principal, is called the line of life: this line incloses the thumb-

Separating it from the hallow of the hand. The next to it, which is called the natural Line, takes its beginning from the rising of the fore finger, near the Line of Life, and reaches the Table Line, and generally makes a triangle. The Table Line commonly called the Line of Fortune, begins under the little finger and ends near the middle finger. The Girdle of Venus, which is another line so called, begins near the joint of the little finger, and ends, between the fore finger and the middle finger. The Line of Death is that which plainly appears is a counter line to that of Life, and is by some called the Sister Line, ending usually as the other ends: For when the line of life is ended, death comes, and it can go no farther. There are also lines in the fleshy parts, as in the ball of the thumb, which is called the Mount of Venus; under each of the fingers are also mounts, which are each governed by a several planet, and the hallow of the hand is called the plan of Mars: Thus.

The thumb we to dame Venus rule commit,
 Jove the fore finger sways as he thinks fit,
 Old Saturn does the middle finger guide,
 O'er the ring finger Sol does still preside;
 The outward drawn pale Cynthia doth direct,
 And in the hallow Mars does most inspect;
 The Little-finger does the Mercury fall,
 Which is the nimblest planet of them all,



CHAP. V.

Judgments drawn from the several parts of the Body, from the Hands to the Feet.

A LARGE full breast shews a man valliant and courageous, but withal proud, and hard to deal with quickly angry, and very apprehensive of injury. He whose breast is narrow and which riseth little in

the middle of it, is of clear spirit of great understanding, good in counsel, very faithful, clean both in mind and body. He whose breast is something hairy, is very luxurious, and serviceable to another. He who has no hairs upon his breast, is a man weak by nature, of a slender capacity, and very timorous, but of a laudable life and conversation, inclined to peace, and much retired to himself.

The back of the chin bone, if the flesh be any thing hairy and lean and higher than the other part that is behind, signifies a man shameless, beastly, and withal malicious. He whose back is large, thin and fat is thereby denoted to be a strong and stout man but of a heavy disposition, vain, slow, and full of deceit.

A man who has a great paunch or belly strutting out, is apt to have a great opinion of himself, a great eater, and a great drinker, slow in understanding, and slow in what he undertakes; yet very magnanimous and indifferently honest. He whose belly is but little, is for the most part a laborious man, constant in his undertaking, sagacious, of a good understanding, and sound judgment. He whose belly is very hairy that is to say, from the navel downwards, is denoted thereby to be very talkative, bold, apprehensive, witty, a lover of learning and eloquence, and speaks himself noble in his resolutions, but not very fortunate.

He or she whose flesh is soft all over the body, is weak lustful, and fearful upon little or no occasion of a good understanding, and an excellent invention, but a little eater, faithful, but of various fortune, and meets with more adversity than prosperity.

A thigh full of hair, and the hair inclined to curl, signifies one lustful, licentious, fit for copulation. Thighs with but little hair and those soft and slender, shew the person to be reasonably chaste, and one that has no great desire to venereal pleasures, and who will have but few children.

Hips that are fleshy, denote the person to be bold strong and prodigal; but on the contrary, hips thin

and lean signify the person to be weak, timorous and unfit for labour.

Knees that are full and fat, do signify a man to be liberal, but very fearful, vain, and not able to endure any great labour; but he whose feet are lean, and the bones thereof do not easily appear, is strong, bold, industrious, and not apt to be tired, a good foot man and one that delights to travel.

The legs of both men and women have a fleshy substance behind which is called calves, which nature hath given them, denotes the person to be very strong, bold, secure, dull in understanding, and slow in business, inclined to procreation, and for the most part fortunate in his undertakings. Little legs and but little hair on them, shews the person to be weak, fearful, of a weak understanding, and neither luxurious at bed or board. He whose legs do much abound, with hairs, shews he has great store in another place, and that he is lustful and luxurious, strong, but unstable in his resolutions; and abounding with ill humours.

The joints of the feet, if they be broad and thick, and stand out withal, signify the person to be shame faced, fearful, weak, and not able to endure hardship or much labour, but withal very faithful, apprehensive of any thing, and kind to his friend. He or she, the nails of whose feet are crooked like cony, is a person of a malicious, greedy and ravenous disposition,

The feet of either man or woman, if broad and thick with flesh and long in figure, especially if the skin feels hard, they are by nature of a strong constitution and a gross nutriment, but of a weak intellect which render their understanding vain: but feet that are thin and lean, and of soft skin, shews the person to be but weak in body, but of a strong understanding; and of an excellent wit.

Those whose nails on the feet are white and handsome mixture of redness, are healthy persons; and those whose nails are gross and of another colour are for the most part sickly and weak.

The heels when little and lean, shew a person apt to entertain fear, upon any light occasion, and also denote weakness and simplicity. When the heels are full that is to say, great and thick, it is a sign the person is bold, strong and courageous, and apt to endure labour.

The soles of the feet do administer plain and evident signs whereby the dispositions and constitutions of men and women may be known, as do the palms of their hands; being as full of lines, by which lines all the fortunes and misfortunes, of men and women may be known, and their manners and inclinations made plainly to appear. But this is in general we may take notice of, that many long lines and strokes, do presage many afflictions and a very troublesome life, attended with much grief and toil, care, poverty, and misery; but short lines, if they are thick and full of cross lines, are yet worse in every degree.

I shall conclude by giving an account of what judgments may be drawn, by the rules of physiognomy from things extraneous to the body, and those excrescences which are found in many.

Of crooked and deformed persons.

A Crooked breast or shoulder or the exuberance of flesh in the body either of man or woman, signifies the person to be extremely parsimonious, and ingenious, and of great understanding; but very covetous, and scraping after the things of the world, attended also with a very bad memory: being also very deceitful and malicious, they are seldom in a medium, but either very virtuous or extremely vicious. But if the person deformed hath any excrescence in his breast, instead of the back, he is for the most part a double heart, and very mischievous.

Of the divers Manners of going, and particular Posture of Men and Women.

He or she that goes slowly, making great steps as they go, are generally persons of bad memory and dull

of apprehension, given to loitering and not apt to believe what is told them. He who goes a pace and makes short steps, is for the most part lucky in his undertakings, swift in imagination and nimble in the disposition of his affairs. He who makes wide uneven steps, and goes side long withal, most certainly denotes a person to be of a most greedy and fordid nature.

Of the common Gait and Motion both in Man and Woman.

Every man hath a certain kind of gait and motion to himself, and so in a manner hath every woman: for a man to be shaking his head, or using any light motion with his hands or feet, when he should be retired, this man whether he stands, sits, or speaks is always accompanied with an extravagant motion, unnecessary, unhandsome; this man is vain unwise, unchaste and unfaithful. He or she whose motion is not much when discoursing with any one, is for the most part well bred, and fit for any employment, ingenious and apprehensive, frugal, faithful and industrious in business. He whose posture is forward and back, or as it were walking up and down, mimical, is thereby denoted to be a vain, silly person, of a heavy and dull wit, and very malicious. He whose motion is limping and lame, or any otherwise imperfect, or that counterfeits an imperfection, is denoted to be invidious, false and malicious.

Judgments from the Stature of Man.

PHYSIOGNOMY draws several judgments also from the stature of a man, which take as followeth, If a man be upright and straight, inclined rather to leanness than to fat, it shews him to be bold, cruel loud calamorous, hard to please, and harder to be reconciled when displeased very frugal, deceitful, and in many things malicious. To be of a tall stature, and corpulent with it denotes him to be not only handsome but valliant, also but of no extraordinary under

standing, and, which is worst of all ungrateful and trepanning. He who is extremely tall, and very lean and thin is a projecting man that designs good to himself, and suspects every one to be as himself, importunate to obtain what he desires and extremely wedded to his own humours. He who is thick and short, is vain, envious, suspicious, and very shallow of apprehension, easy of belief, but long before he will forget an injury. He who is lean and short, but upright withal, is by the rule of physiognomy, wise and ingenious, bold and confident, and of a good understanding but of a deceitful heart. He who stoops as he goes, not so much by age as custom, is very laborious, a retainer of secrets, but very incredulous, and not easy to believe every vain report he hears.

General Observations worthy of Note.

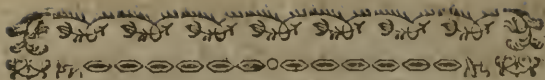
WHEN you find a red man to be faithful; a tall man to be wise; a fat man to be swift on foot; a lean man to be a fool; a handsome man not to be proud, and poor, not be envious; a whitely man to be wise; one that talks in his nose to speak without snuffing; a knave to be no liar; an upright man not too bold and hearty to his own loss; one that draws when he speaks not to be crafty and circumventing; a man of a hot constitution and full of hair on his breast and body, not to be lustful; one that winks on another with his eyes, not to be false, and deceitful; one that knows how to shuffle his cards, to be ignorant how to deal them; a rich man to be prodigal; a sailor and hangman to be pitiful; a poor man to build churches; a higler not to be a liar a praiser of his ware; a buyer not to find fault with, and under-value what he would willingly buy: a quack-doctor to have a good conscience to God and man; a bailiff not to be a merciless villain; an hostess not to overreckon you, and an usurer to be charitable: then say you have found a prodigy, or men acting contrary to the common course of their nature.

C H A P. VI.

Of the power of the celestial Bodies over
Men and Women.

HAVING spoken thus largely of physiognomy, and the judgments given thereby concerning the dispositions and inclinations of men and women, drawn by the said art from every part (yea, even from the excrecence) of the bodies of men and women, it will be convenient here, to shew how all these things come to pass; and how it is that the secret inclinations and future fates of men and women may be known from the consideration of several parts of the body. They arise from the power and dominion of superior powers over bodies inferior. By superior powers I understand the twelve signs of the Zodiac, whose signs, characters, and significations are as follow :

1. Aries, a ram, which governs the head and face.
2. Taurus, a bull, which governs the neck.
3. Gemini, the twins, which governs the hands and arms.
4. Cancer, a Crab, which governs the breast and stomach.
5. Leo, a lion, which governs the back and heart.
6. Virgo, a virgin, who governs the body and the bowels.
7. Libra, a pair of balance,, which govern the reins and loins.
8. Scorpio, a scorpion, he governs the secret parts.
9. Sagitarins, a satyr with bow and arrows, who governs the thighs.
10. Capricorn, a goat, he governs the knees.
11. Aquarius, a young man pouring out a cup of water, he governs the legs.
12. Pisces, a fish he governs the feet.



T H E

FAMILY PHYSICIAN.

Being choice and approved remedies for
several distempers incident to human bod-
ies.

*A Cephalic Powder for Fits and Convulsive Disorders
in the Head.*

TAKE man's skull, prepared powder of the roots
of male peony, of each an ounce and a half :—
contrayerva, bastard dittany, angelica, zedoary ; of
each two drams, mix and make a powder ; add there-
to two ounces of candied orange, and leoman peel,
beat all together to a powder, whereof you may take
half a dram, or a dram.

A powder for the epilepsy or falling sick-
ness.

Take of appopanax, crude antimony, dragon's
blood, castor peonyseed, of each an equal quantity ;
make a subtil powder, the dose from half a dram in
black cherry water. Before you take it, the stomach
must be cleansed with some proper vomit, as that of
Mynsicht's emetic tartar, from four grains to six ;
if for children, salt of vitriol, from a scruple to half a
dram.

For a head ache of a long standing.

Take the juice of powder, or distilled water of
hoglice, and continue the use of it.

For spitting of blood.

Take conserve of confrey, and of hippe, of each an
ounce and an half ; conserve of read roses, three ounce

ees ; dragon's blood a dram ; species of hyacinthia two scruples : red coral a dram ; mix, and with syrup of red poppies make a soft electuary, take the quantity of a walnut pight and morning.

For a loofness.

Take of Venice treacle and discordium, of each half a dram in warm ale, water gruel, or what you best like. Use at night going to bed,

For the bloody Flux.

First take a dram of the powder of rhubarb in a sufficient quantity of conserve of red roses, in the morning early, then at night take of torrifed or roasted rhubarb half a dram : discordium a dram and an half ; liquid laudanum cydoniated, a scruple ; mix, and make a bolus.

For an inflammation of the lungs.

Take chariots ware ten ounces, water of poppies three ounces, syrup of poppies an ounce ; peat prepared a dram ; make a julep, and take six spoonfuls every fourth hour.

An ointment for the plurisy.

Take oil of violets, or sweet almonds ; of each an ounce ; with wax and a little saffron make an ointment, warm it and bath it upon the part affected.

An ointment for the itch.

Take sulphur vive in powder, half an ounce ; oil of tartar per de iquium, a sufficient quantity ; ointment of roses four ounces ; make a lineament, to which add a scruple of rhodium to aromatize, and rub the parts affected with it.

For a running Scab.

Take two pounds of tar, incorporate it into a thick mass with good sifted ashes ; boil the mass in fountain water, adding leaves of groundivy, white horehound, fumitory roots of sharp pointed dock, and of lacan-pan, of each four handfuls make a bath to be used with care of taking cold.

For worms in Children.

Take worm seed half a dram; flour of sulphur, a dram; salt punelle, half a dram: mix and make a powder. Give as much as will lye on a silver threepence, night and morning in grocers treacle or honey. Or for people grown up, you may add a sufficient quantity of aloes, rosat, and so make them up into pills, three or four thereof may be taken every morning.

For Fevers in Children.

The crab's eyes, a dram; cream of tartar, half a dram, white sugarcandy finely powdered, the weight of both; mix all well together, and give as much as will lye upon a silver three-pence in a spoonful of barley water, or sack whey.

A quieting night Draught when the Cough is violent.

Take water of green wheat six ounces; syrup of diascordium three ounces; take two or three spoonfuls going to bed every night, or every other night.

An Electuary for the Dropsy.

Take chile rheubarb one dram (gum lace prepared two drams; zyloaloes, cinnamon, longbirth wort, of each half an ounce; the best English saffron half a scruple, with syrup of chychory and rheubarb make an electuary.

For a Tympany Dropsy.

Take roots of chervil, and candied erigon roots, of each an ounce; roots of butcher brooms two ounces; grass-roots three ounces; shavings of ivory and hartshorn, of each two drams and a half; bardock-seeds three drams, boil, them in three pounds of spring-water to two. While the strained liquor is hot, pour in upon the leaves of water cresses and goose grass bruised, of each a handful; adding a pint of rhenish wine: make a close infusion for two hours, then strain out the liquor again, and add to it three ounces of magistral water of earth worms, and an ounce and a half of syrup of the five opening roots, make an apozem, whereof take four ounces twice a day.

Aristotle's Master-Piece

Aristotle, pseud.

Worcester: Daniel Greenleaf, 1801

National Library of Medicine

Bethesda, MD

CONDITION ON RECEIPT:

The full leather scabbard board ticketed binding was worn. There was some darkening and skinning on the spine and edges. The joints on the front and back boards were broken for 1½ centimeters at the top. The text block was tacketed with vellum strips; many pages were detached. Some loose pages were tipped together with adhesive. Most of the pages were dirty, discolored, acidic, and water stained. Some of the pages had a few small tears, particularly at the edges and at the fold and tickets. The first page was adhered to the front pastedown; the paper was skinned where separation had been attempted. There was evidence of insect damage on some of the pages and both pastedowns. The printing ink varied in intensity. A bookplate was adhered to the front pastedown.

TREATMENT PROVIDED:

Treatment was documented with color slides. The pH was recorded before and after treatment: before 4.0, after 7.0. The volume was collated and disbound. The inks were tested for solubility. The pages were dry cleaned, washed and then alkalized (deacidified) with calcium hydroxide. Tears were mended and folds guarded with Japanese kozo paper and wheat starch paste. The bookplate was removed with local applications of moisture and readhered onto the new pastedown. The volume was sewn on linen tapes with linen thread. Handmade paper endsheets with linen hinges were attached. The volume was case bound in full cloth and titled using a gold-stamped leather label.

Northeast Document Conservation Center
March 2003
DW/KI

